



ICSE 2025 EXAMINATION
SPECIMEN QUESTION PAPER
GEOGRAPHY
(H.C.G. PAPER – 2)

Maximum Marks: 80

Time allowed: Two hours

Answers to this Paper must be written on the answer sheet provided separately.

You will not be allowed to write during the first 15 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

Part I is compulsory. All questions from Part I are to be attempted.

A total of five questions are to be attempted from Part II.

The intended marks for questions or parts of questions are given in brackets [].

To be supplied with this Paper: Survey of India Map Sheet No. G43S7 and 20 cm of twine.

Note:

- (i) ***In all Map Work, make wise use of arrows to avoid overcrowding of the map.***
- (ii) ***The extract of Survey of India Map Sheet No. G43S7 must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the paper.***
- (iii) ***The Map given at the end of this question paper must be detached, and after marking, must be fastened to your answer booklet.***
- (iv) ***All sub-sections of the questions attempted must be answered in the correct serial order.***
- (v) ***All working including rough work should be done on the same answer sheet which is used to answer the rest of the paper.***

Instruction for the Supervising Examiner

Kindly read aloud the Instructions given above to all the candidates present in the Examination Hall.

PART I (30 Marks)

(Attempt all questions from this Part.)

Question 1

Study the extract of the **Survey of India** Map sheet No. **G43S7** and answer the following questions:

- (i) (a) Give the six-figure grid reference for .201 in the eastern part of the map extract. [2]
- (b) What are the brown patches in the north east quarter of the map extract? [Apply & Understanding]
- (ii) Mohan goes on a bicycle from 02 northing to 12 northing in a straight line. If he moves at a speed of 10 kilometers per hour, how much time will he take to reach his destination? [2]
- [Apply]
- (iii) (a) What is the compass direction of Rampura (2709) from Kotda (3005)? [2]
- (b) If you are moving along the left bank of Sipu river, which settlement will you come across? [Analyse]
- (iv) (a) Ramesh returned to his native place Mahudi Moti (2404) after a gap of ten years and was happy to see the development around his village. What according to you show that the area around his village has developed? [2]
- (b) What is the black vertical line made between the easting 25 and 26? [Apply & Remember]
- (v) Mention two manmade and two natural features in the grid square 2508. [2]
- [Understanding]

Question 2

On the outline map of India provided:

[Recall]

- (i) Shade and label an area of alluvial soil in the north-east. [1]
- (ii) Mark using a dot and name the commercial capital of India. [1]
- (iii) Mark and name the highest peak of Himalayas in India. [1]

- (iv) Shade and label Gulf of Kutch. [1]
- (v) Mark with arrows and name the wind bringing rainfall to Punjab in winter. [1]
- (vi) Shade and label a sparsely populated area. [1]
- (vii) Mark and label Eastern Ghats. [1]
- (viii) Mark and name a tributary of an important peninsular river [1]
- (ix) Mark and label the most important latitude passing through the country. [1]
- (x) Mark and label Coromandel coast. [1]

Question 3

Choose the correct answers to the questions from the given options.

[10]

(Do not copy the question, write the correct answers only.)

(i) Himalayas have a significant impact on the climate of India as they:

- (a) Block the N.E. monsoon winds
- (b) Causes rainfall in the Gangetic plains
- (c) Create a rain shadow area in the Deccan plateau
- (d) Cause cyclonic disturbance in the Bay of Bengal

[Apply]

(ii) Feel and consistency of soil is called _____ of the soil.

- (a) Profile
- (b) Parent rock
- (c) Texture
- (d) Density

[Remember]

(iii) Teak: Tropical deciduous forest

- (a) Mahogany: Furniture
- (b) Stilted roots: Mangrove Vegetation
- (c) Ebony: Tropical Rainforest
- (d) Spines: Tropical Desert Vegetation.

[Remember]

(iv) Which of the following may be used for the recharging of underground water?

- (a) Planting of shelter belt
- (b) Plugging of gullies and ravines
- (c) Percolation pit
- (d) Tube-well irrigation

[Understanding]

(v) Which type of coal is referred to as industrial coal?

- (a) Peat
- (b) Lignite
- (c) Bituminous
- (d) Anthracite

[Remember]

(vi) **Assertion (A):** During the late 1960s, there was a many-fold increase in the production of wheat in Punjab.

Reason (R): The Green revolution brought about increased use of inputs like HYV seeds, fertilizers and pesticides.

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R does not explain A
- (c) A is true but R is false
- (d) A is false but R is true

[Analysis]

(vii) Which crop is associated with Ratooning?

- (a) Sugarcane
- (b) Jute
- (c) Rice
- (d) Cotton

[Remember]

(viii) Which steel plant amongst the following was set up with the collaboration with Germany?

- (a) Bhilai
- (b) Tata Steel
- (c) Vishakhapatnam
- (d) Rourkela

[Remember]

(ix) If you have to transport perishable goods over a long distance, which mode of transport will you use and why?

- (a) Air transport because it is the fastest.
- (b) Road transport as it is economical.
- (c) Rail transport as it is ecofriendly.
- (d) Water transport as it can handle large amount of goods.

[Apply]

(x) Which of the following methods of disposal is best applicable for the waste depicted in the picture below:



- (a) Burning waste in open area.
- (b) Recycling waste.
- (c) Dumping.
- (d) Composting.

[Apply]

PART II (50 Marks)

(Attempt *any five* questions from this *Part*.)

Question 4

- (i) *India Meteorological Department (IMD) brings a ray of hope for India's agricultural sector and weather patterns in the upcoming year. After grappling with 'below normal' rains and dry conditions in 2023, the forecast suggested above-normal rainfall in certain regions, including the southernmost parts of peninsular India, northwest India, and several parts of east-central, east, and northeast India.* [2]

– Investing.com (01.11.2023)

- (a) As a student of Geography, what according to you may be the possible reason for the 'below normal' rains in 2023?
- (b) During which months of the year does most of India receive major amount of its rainfall?

[Analyse &
Apply]

- (ii) What is the source of winter rainfall in each of the following areas? [2]

- (a) Punjab
- (b) Tamil Nadu

[Remember]

- (iii) Give a reason for each of the following: [3]

- (a) Kerala gets rainfall from the summer monsoons much before Uttar Pradesh.
- (b) Vishakhapatnam records a low annual range of temperature.
- (c) Winds are mostly offshore during the cold season.

[Analyse]

- (iv) Study the climatic data of station X and answer the following questions: [3]

Month	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Temp (°C)	23.1	24.8	26.5	29.3	32	32.8	33.1	32.1	30.5	29.3	28.7	26.1
Rainfall (cm)	7.3	1.1	0.3	0.1	1.3	4.5	6.1	8.2	8.5	20.1	20.8	9.0

- (a) What is the annual range of temperature of station X?
- (b) Which is the driest month?
- (c) Name the wind that brings maximum rainfall to this station.

[Apply]

[Understand]

[Analyse]

Question 5

- (i) Nathu, a farmer in Bihar, does not get good yields as the soil he tills is coarse and has fair proportion of kankars. Motilal on the other hand has his field closer to the river and gets better yields. [2]
- (a) Identify the two soils that are being discussed in the above passage.
- (b) Give a possible reason why Motilal benefits from having his field along the river banks. [Remember and Apply]
- (ii) With reference to soil erosion in India answer the following questions. [2]
- (a) State any two human activities that have led to soil erosion in India.
- (b) Mention any two innovative agricultural techniques that can help to prevent soil erosion. [Apply]
- (iii) With reference to Red Soil, answer the following: [3]
- (a) How is it formed? [Understanding]
- (b) Why is it good for Dry Farming? [Apply]
- (c) Name any two areas where it is found. [Recall]
- (iv) Give a reason for the following statements: [3]
- (a) Black Soil has self-ploughing property.
- (b) Laterite Soil is not suitable for cultivation.
- (c) Alluvial soil is extensively found in the Northern Plains. [Analyse]

Question 6

- (i) Mahesh went for an excursion with his friend and came across a marshy area with trees that had stilt like roots. [2]
- (a) Which natural vegetation belt did he come across? [Apply]
- (b) Name an area in India where this kind of vegetation is found. [Recall]
- (ii) (a) Why is tropical deciduous forest commercially the most important forest belt of India? [2] [Evaluate]
- (b) Why are long and deep roots a typical characteristic of desert vegetation? [Evaluate]

(iii) Give three reasons why forest conservation is the need of the hour. [3]

[Analyse]

(iv) (a) Name a forest conservation method that involves the local community. [3]
[Remember]

(b) Which primitive system of agriculture had led to large scale destruction of forest in the past? [Remember]

(c) Name the process which involves planting two saplings for each tree that is felled. [Remember]

Question 7

(i) State two reasons why there is a need for irrigation in India. [2]

[Understand]

(ii) Distinguish between Inundation Canals and Perennial Canals. [2]

[Analyse]

(iii) (a) Name a state in India where tube wells are commonly used. [3]

(b) Give two geographical conditions that favour tube well irrigation in this state. [Analyse]

(iv) (a) What is meant by Rainwater Harvesting? [3]

(b) Mention *any two* water harvesting practices followed in India. [Understand and Remember]

Question 8

(i) There is ample potential of setting up biogas plants in India. The National Bioenergy Programme has been recommended by the concerned Ministry, for implementation in two phases. The spread of biogas technology is a boon for Indian farmers with its direct and guaranteed benefits. (<https://biogas.mnre.gov.in>) [2]

(a) Why do you think generation of biogas can be achieved in every household of rural India?

(b) Mention two ways in which generation of this form of energy proves to be a boon for Indian farmers. [Analyse and Evaluate]

(ii) With reference to Hirakud project answer the following: [2]

(a) On which river is it based? [Remember and

(b) Name an Indian state benefitted by the project. Apply]

(iii) (a) Give any one use of iron ore. [3]

(b) Name the mineral used to strengthen steel. [Apply &

(c) Name two Indian states where copper is found. Remember]

(iv) [3]



(a) Identify the type of energy being harnessed in the above picture.

(b) Mention why this form of energy is preferred over fossil fuels.

(c) Why does India stand at an advantage in the production of this type of energy.

[Understand,
Evaluate &
Apply]

Question 9

(i) Mention *two* agricultural reforms done by the government for the [2]

betterment of the agricultural sector. [Understand]

(ii) (a) State one point of difference between Rabi and Kharif cropping [2]

seasons.

(b) Name the state that is the leading producer of groundnut in India.

[Analyse &
Remember]

(iii) With reference to cultivation of pulses answer the following: [3]

(a) Name a soil found suitable for the growth of pulses.

[Understand]

(b) Name any two varieties of pulses grown in India.

[Remember]

(c) Give a reason why is it a popular food crop of India.

[Evaluate]

(iv) Rohan, a farmer, hired some labourers to help him with 'GINNING'. [3]

(a) Name the crop grown by Rohan.

[Apply]

(b) Mention any two climatic conditions suitable for this crop.

[Recall]

Question 10

- (i) Mention two points of difference between Small scale and Large scale industry. [2]
[Analyse]
- (ii) Explain two ways in which cotton textile industry is important for India's economy. [2]
[Understand]
- (iii) With reference to petrochemical industry answer the following: [3]
- (a) State a reason for the growing popularity of this industry in recent times. [Apply]
- (b) Why is it located close to oil refineries? [Evaluate]
- (c) Name *any two* petrochemical products. [Remember]
- (iv) Give one reason to explain each of the following: [3]
- (a) Sugar production is gradually gaining importance in peninsular India.
- (b) Indian silk products are becoming less popular in the international market.
- (c) The importance of the iron and steel industry will never decline. [Analyse]

Question 11

- (i) Mention *two* disadvantages of using waterways. [2]
[Understand]
- (ii) The Golden Quadrilateral has contributed towards improvement of the Indian economy- Explain. [2]
[Understand]
- (iii) (a) Which rail gauge is mostly limited to hilly areas only? [3]
- (b) Name the organization responsible for the maintenance of the National Highways of India. [Understand & Remember]
- (c) Which is the Inland Waterway that connects Prayagraj to Haldia?

- (iv) Give a reason for each of the following: [3]
- (a) At present times, airports are being established even in smaller towns of India.
 - (b) Railways are well developed in the northern states of India.
 - (c) Helicopter services are crucial during emergencies. [Analyse]

Question 12

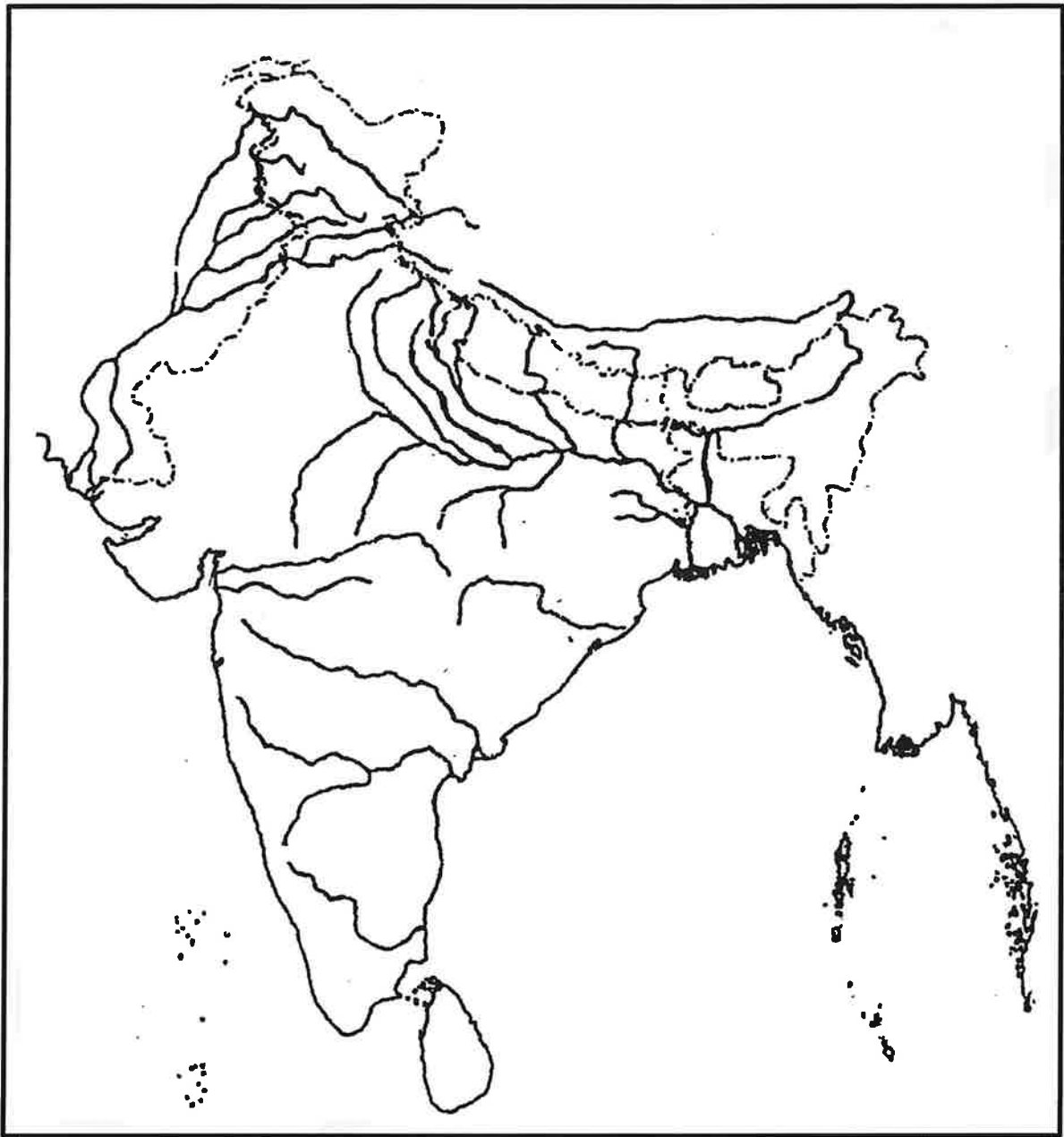
- (i) What is the impact of waste generation on the following? [2]
- (a) Surface water
 - (b) Landscape [Understand]
- (ii) Why is dumping considered a harmful method of waste disposal? [2]
- [Analyse]
- (iii) *Fire broke out at the Kochi city waste treatment plant. Thick clouds of toxic smoke engulfed the city. The waste at the plant also contained plastic and biomedical wastes, both of which on combustion are extremely harmful for the general health of people.* [3]
- Economic Times, 10.03.2023
- (a) Which method of waste management would have helped in reducing health hazard in the above case? [Analyse]
 - (b) Mention one measure you can adopt in school to reduce waste. [Apply]
 - (c) State one way in which domestic waste can be made useful. [Understand]
- (iv) (a) What are landfills? [3]
- (b) Enumerate two advantages of composting as a method of waste disposal. [Remember & Apply]

Question No. 2

Index No..... UID.....

(This map, if used, must be fastened with all other answers)

Map of India for Question 2.



ONLY FOR THE EXAMINER										
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	Total



CONTOUR INTERVAL 20 METRES

NOTES :

Heights are in metres and above Indian mean sea level.
Contours are approximate.
A relative height, e.g., 8r, represents the approximate height, in metres, between the top and bottom of steep slope.
A relative height, e.g., 30r, against a well indicates its total depth in metres.
Tanks, shown dry, in this area usually contain water from July to February.
Unmetalled roads and cart-tracks in this sheet are generally motorable (four-wheel drive) in dry season.
Diggi is a tank which is used for collection of water.

Express highway: with toll; with bridge; with distance stone	
Roads, metalled: according to importance	
Roads, double cartage-way: according to importance	
Unmetalled road: Cart-track; Pack-track with pass; Foot-path	
Streams: with track in bed; undefined; Canal	
Dams: masonry or rock-filled; earthwork; Weir	
River: dry with water channel; with island & rocks; Tidal river	
Submerged rocks; Shoal; Swamp; Reeds	
Wells: lined; unlined; Tube-well; Spring; Tanks: perennial; dry	
Embankments: road or rail; tank; Broken ground	
Railways, broad gauge: double; single with station; under constrm.	
Railways, other gauges: double; single with distance stone; do	
Mineral line or tramway; Kin. Cutting with tunnel	

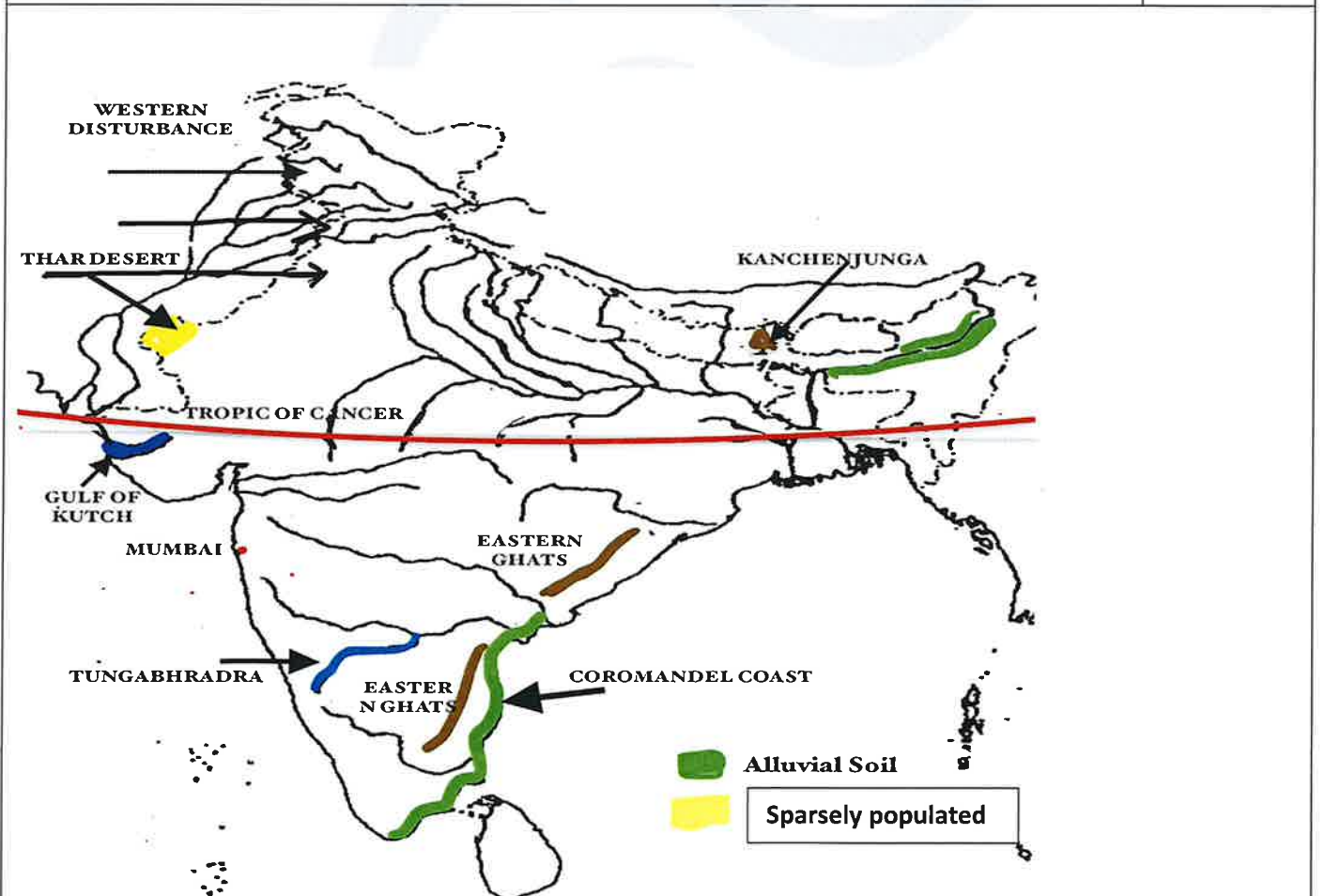
Lighthouse; Lightship; Buoys: lighted; unlighted; Anchorage	
Mine; Vine on trellis; Grass; Scrub	
Palms; palm-tree; other; Plantain; Conifer; Bamboo; Other trees	
Areas: cultivated; wooded; Surveyed tree	
Boundary, international	
" state; demarcated; undemarcated	
" district; subdivision; tahsil or taluk; forest	
Boundary pillars: surveyed; unlocated	
Heights, triangulated: station; point; approximate	
Bench-mark: geodetic; tertiary; canal	
Post office; Overhead tank	
Rest house or inspection bungalow; Circuit house; Police station	
Cemeteries; Forest; reserved; protected	

ICSE 2025 – SPECIMEN PAPER

DRAFT MARKING SCHEME – GEOGRAPHY (H.C.G. PAPER 2)

Question 1		[10]
(i)	(a) 301074 (b) Sand dunes.	
(ii)	One hour	
(iii)	(a) North west (b) Jhat	
(iv)	(a) Powerline showing that the village now has electricity. (b) Longitude / Meridian	
(v)	Natural features: Sand dune. Broken Ground. Man made features: Cart track / Pack track / Permanent hut / temple <i>(Any two)</i>	

Question 2	[10]
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Question 3		[10]
(i)	(c) Causes rainfall in the Gangetic plains	
(ii)	(c) Texture	
(iii)	(c) Ebony: Tropical Rainforest	
(iv)	(c) Percolation pit	
(v)	(c) Bituminous	
(vi)	(a) Both A and R are true and R is the correct explanation of A.	
(vii)	(a) Sugarcane	
(viii)	(d) Rourkela	
(ix)	(a) Air transport because it is fastest.	
(x)	(b) Recycling waste.	
Question 4		[10]
(i)	(a) Global warming/El Nino effect (b) June to September	
(ii)	(a) Western disturbances originating in the Mediterranean region/Temperate cyclones (b) North-east winter monsoon wind/retreating monsoon.	
(iii)	(a) Kerala lies in the southwest of the country where the southwest monsoon wind strikes first. The wind then advances to the north and reaches Uttar Pradesh. (b) Visakhapatnam has a coastal location and experiences the moderating influence of the sea. (c) Land loses heat fast and high pressure develops over it during the cold season. The surrounding seas remain warm and have low pressure during this time. Thus winds blow from land to sea and are offshore.	
(iv)	(a) 10° C (b) April. (c) Tropical Cyclones / Retreating Monsoon winds / Northeast Winter Monsoon wind	
Question 5		[10]
(i)	(a) Bhangar and Khadar respectively. (b) The khadar soil gets replenished every year and is hence more fertile.	
(ii)	(a) Deforestation / mining / urbanization / industrialization / over grazing / shifting cultivation (b) Crop rotation / contour ploughing / strip cropping / shelter belts	



(iii)	(a) Erosion and weathering of crystalline metamorphic and igneous rocks. (b) Porous / cannot hold moisture (c) Parts of Odisha / Madhya Pradesh / Chhattisgarh / Jharkhand / Tamil Nadu / Karnataka/ Meghalaya/ Manipur/ Nagaland/ Mizoram	
(iv)	(a) Black soil hardens and cracks when dry which helps in aeration of the soil naturally. (b) Due to leaching, the essential minerals percolate down the soil profile making the top soil infertile. (c) The numerous rivers here bring large amounts of sediments and deposit them to form fertile plains.	
Question 6		[10]
(i)	(a) Tidal / Littoral (b) Delta of R. Ganga in Sundarbans / deltas of R. Godavari / Krishna / Kaveri	
(ii)	(a) Hardwood / occur in pure stands making exploitation easier/ less dense than Tropical rainforests (b) To draw water from deep underground as rainfall is scanty here	
(iii)	Provides us with oxygen & purifies air / Absorbs carbon dioxide and reduces rate of global warming / Allows percolation of water and recharges ground water / Flood control / Habitat for numerous species of plants & animals / roots hold the soil particles & checks soil erosion / transpiration induces rainfall <i>(Any three points)</i>	
(iv)	(a) Social forestry (b) Jhum cultivation / shifting agriculture / slash & burn method of farming (c) Reforestation / Afforestation	
Question 7		[10]
(i)	Rainfall is erratic / rainfall is unevenly distributed / rainfall is seasonal / some crops like rice and sugarcane need more water / to expand area under cultivation / to enable the use of high-yielding variety seeds. <i>(Any two reasons)</i>	
(ii)	Inundation canals are floodwater canals that carry water only during the rainy season when the river floods. Perennial canals carry water all year round as they have a weir or dam at the head to regulate the flow of water.	
(iii)	(a) Punjab / Haryana / Uttar Pradesh / Bihar / West Bengal (b) High groundwater table / steady supply of electricity / soft soil / fertile, productive land that can make this expensive method viable <i>(Any two)</i>	



(iv)	(a) Collection and storage of rain water for future use (b) Rooftop rain water harvesting / percolation pit / bore well / dug well / johad / tankas / percolation tank / recharge pit / Zing <div style="text-align: right;">(Any two)</div>	
Question 8		[10]
(i)	(a) Every rural household generates organic kitchen waste and animal waste which can be converted into useful biogas. (b) Generation of biogas produces bio-fertilizer as by-product It reduces the volume of waste. It brings about improved hygiene in rural areas. It is cheap as no raw materials need to be purchased. <div style="text-align: right;">(Any two)</div>	
(ii)	(a) R. Mahanadi (b) Odisha	
(iii)	(a) Production of steel (b) Manganese (c) Madhya Pradesh/ Rajasthan/ Jharkhand <div style="text-align: right;">(Any two)</div>	
(iv)	(a) Solar energy (b) Clean source of energy Inexhaustible Reduces pressure on fossil fuel Cheaper in the long run <div style="text-align: right;">(Any one)</div> (c) India has a tropical location and receives more or less strong rays of the sun for a large part of the year.	
Question 9		[10]
(i)	Green Revolution / Use of HYV seeds / development of irrigation facilities / Rural banks and cooperatives have been set up so that easier for farmers to get loans / Credit facilities / Mass communication to raise awareness / distribution of fertilizers & pesticides at subsidized rates <div style="text-align: right;">(Any two)</div>	
(ii)	(a) Rabi: Winter crop / sown in October or November / Harvested in February or March Kharif : Summer crop / Sown in May or June / Harvested in September or October (b) Gujarat	



(iii)	<p>(a) Any type of soil like alluvial, black. Cultivation also possible on red and laterite with irrigation. (Any one)</p> <p>(b) Moong, Masoor, Toor, Urad, Chana, Arhar, Gram (Any two)</p> <p>(c) Leguminous crop, helps to replenish the soil naturally / important source of plant protein / can be grown in any type of soil / hardy crops that can grow in difficult climatic conditions (Any one)</p>	
(iv)	<p>(a) Cotton</p> <p>(b) Temperature: 20° to 32° C Rainfall : 50 to 120 cm At least 200 frost free days (Any two)</p>	
Question 10		[10]
(i)	<p><i>Small scale industries:</i> Less capital investment/ employs less labour / goods produced are lesser in quantity</p> <p><i>Large scale industries:</i> Huge capital investment/ large number of workers/ needs large area/ production on a large scale. (Any two)</p>	
(ii)	<p>Gives us valuable foreign exchange / generates employment / helps in the decentralization of industries / meets high domestic demand of a tropical country (Any two)</p>	
(iii)	<p>(a) Cheaper / Durable / Can be manufactured in a short span of time / Attractive (Any One)</p> <p>(b) Facilitates easy availability of raw materials / reduces transportation costs</p> <p>(c) Plastics / Synthetic fibre / Synthetic rubber / PVC pipes. / detergents (Any two)</p>	
(iv)	<p>(a) Sugar plantations are well planned and scientifically managed/modern machineries/use of irrigation facilities/ fertilizers/ managed in the cooperative sector/ large farm size/longer crushing season/ mills located near the sugarcane plantations. (Any One)</p> <p>(b) High price of Indian silk</p> <p>(c) Basic industry whose products including machineries are necessary for all other industries such as railways, roadways, construction purposes, automobiles, ships, infrastructure etc.</p>	
Question 11		[10]
(i)	<p>It is a slow means of transport / Can be affected by weather disturbances / Waterways may not be operational throughout the year / they are operational only where there are seas, oceans and rivers. (Any Two)</p>	



(ii)	It has reduced the time and distance between the cities and ports thereby facilitating fast movement of people and goods/ Better movement of goods to facilitate truck movement/ Better job opportunities/ Export of goods via the ports / small towns on the way have developed into urban centers. <i>(Any two)</i>	
(iii)	(a) The narrow gauge which is operational only in the hill stations. (b) NHAI (The National Highways Authority of India) (c) National Waterway No. 1	
(iv)	(a) To encourage air travel for Indians as it saves time / For the growth of smaller towns and cities / increase job opportunities. <i>(Any one)</i> (b) Flat plain land / agriculturally productive / high density of population. <i>(Any one)</i> (c) Can easily reach remote areas fast/Provides swift medical aid / Helps in the search and rescue operations / Can airdrop potable water and food packets in emergencies. <i>(Any one)</i>	
Question 12		[10]
(i)	(a) Pollution / Death of aquatic animals / eutrophication <i>(Any one)</i> (b) Spoilage of landscape/ Pollution. <i>(Any one)</i>	
(ii)	Leads to soil pollution/ underground water pollution / spread of diseases / gives off bad odour / attracts pests and rodents. <i>(Any two)</i>	
(iii)	(a) Segregation of plastic and bio-medical wastes. (b) Reusing/composting/sending waste for recycling/creating awareness amongst students of all ages/ banning the use of plastics / using biodegradable products/ promote car pool/ pass down text books to junior classes / use old copies as rough book / any other pertinent point. <i>(Any one)</i> (c) Converting old clothes into useful items like doormats, covers, decorative items etc. / Kitchen waste can be made into compost / Reusing glass bottles, unused pages of books / any other pertinent point <i>(Any one)</i>	
(iv)	(a) Landfills are large areas in the outskirts of towns and cities where wastes are deposited in the ground and covered with earth. The waste gradually decomposes, decreases in volume and gets converted to humus. (b) The waste is converted into valuable fertilizers / Waste is considerably reduced / Improves soil texture and fertility / Aids plant growth / Enhances the water holding capacity of the soil. <i>(Any two)</i>	

ICSE SEMESTER 2 EXAMINATION

SPECIMEN QUESTION PAPER

GEOGRAPHY

H.C.G. - Paper – 2

Maximum Marks: 40

Time allowed: One and a half hours

Answers to this Paper must be written on the paper provided separately.

You will not be allowed to write during the first 10 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

*Attempt **all** questions from **Section A** and **any three** questions from **Section B**.*

The marks intended for questions are given in brackets []

SECTION A

*(Attempt **all** questions.)*

Question 1

On the outline map of India provided mark and name the following: [10]

- (i) Himalayas
- (ii) River Ganga
- (iii) Chennai
- (iv) Western Ghats
- (v) Gulf of Kutch
- (vi) Malabar coastal plain
- (vii) Karakoram Pass
- (viii) Black soil area in peninsular region
- (ix) Standard Meridian of India
- (x) Jharia coal field

SECTION B

*(Attempt **any three** questions from this Section.)*

Question 2

- (i) (a) Give any one use of Manganese.
- (b) Why is copper used in electrical appliances? [2]
- (ii) Give two advantages of using Natural gas over coal. [2]
- (iii) With reference to Bhakra Nangal dam answer the following:
 - (a) On which river is it situated?
 - (b) Name any two states benefitted by Bhakra Nangal. [3]
- (iv) (a) Mention two advantages of using biogas.
- (b) How has the nuclear power contributed in reducing the pressure on Conventional sources of energy? [3]

Question 3

- (i) Mention two ways in which agriculture sector is important for India. [2]
- (ii) (a) Name two agriculture seasons of India.
- (b) Name one crop that grows in each of the season mentioned by you. [2]
- (iii) With reference to Wheat cultivation answer the following:
 - (a) Name the soil found suitable for its growth.
 - (b) Name the state that is the largest producer of this crop in India.
 - (c) Why is this crop not grown in southern parts of India? [3]
- (iv) (a) Name the largest producer of tea in India.
- (b) What is GINNING?
- (c) Why is PRUNING essential for tea crop? [3]

Question 4

- (i) Differentiate between public sector and private sector industry giving suitable example for each from India. [2]
- (ii) Give two ways in which cotton textile industry is important for India. [2]
- (iii) With reference to Rourkela steel plant answer the following:
 - (a) Where is it located?
 - (b) Which country helped India to establish this steel plant?
 - (c) From where does it get its iron ore requirement? [3]
- (iv) (a) What are the benefits of using petrochemical products? (*Any two*)
(b) How has the electronic industry revolutionized the entertainment sector? [3]

Question 5

- (i) Mention two advantages of using waterways. [2]
- (ii) Differentiate between national highway and state highway. [2]
- (iii) Mention three benefits of Golden quadrilateral. [3]
- (iv) What are the three disadvantages of using air transport? [3]

Question 6

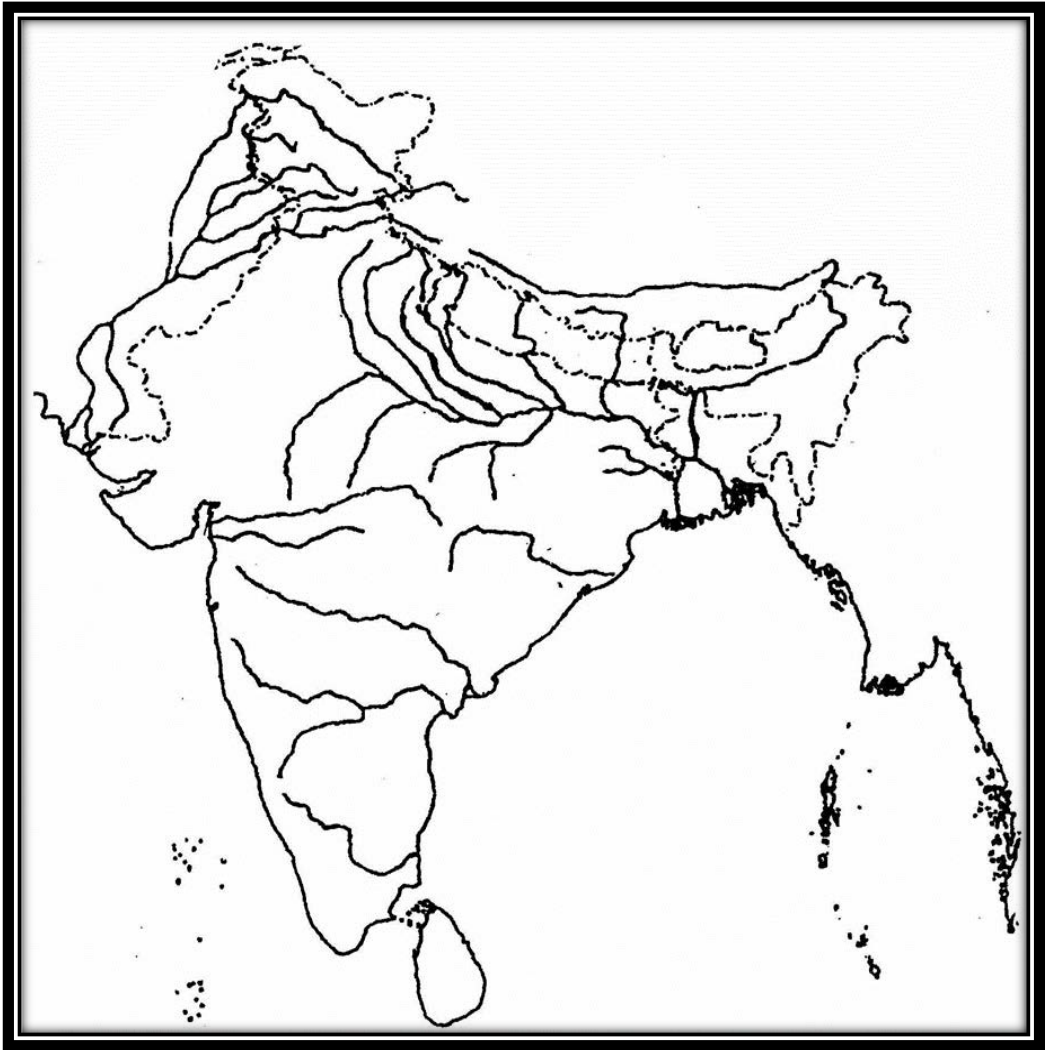
- (i) Why is there a need for waste management in India? (*Two points*) [2]
- (ii) Segregation considered a safe method of waste disposal. Explain. [2]
- (iii) Mention three ways that may be used in India to reduce waste. [3]
- (iv) Mention three reasons as to why the dumping of waste may be harmful. [3]

Question No. 1

Index No..... UID.....

(This map, if used, must be fastened with all other answers)

Map of India for Question 1.



ONLY FOR THE EXAMINER										
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	Total

Answers

Section-A

1.



Section-B

Answer 2.

- (i) (a) Manganese is used in the manufacturing of steel. Manganese gives the steel strength and hardness.
- (b) Copper is used in electrical appliances due to its low resistance and excellent conductivity. It is ductile and relatively less resistant to corrosion.
- (ii) The two advantages of using natural gas over coal are:
 1. Natural gas burns almost completely up to the mark, leaving no ash pile behind.
 2. Natural gas produces about half as much CO₂ as coal to produce the same amount of energy.
- (iii) (a) Bhakra Nangal dam is situated on Sutlej river.
- (b) States benefitted by Bhakra Nangal dam are : Haryana, Rajasthan, Himachal Pradesh and Punjab.
- (iv) (a) The two advantages of using biogas are:
 1. Biogas is a renewable and clean source of energy, like solar and wind power, which can help us in reducing our reliance on fossil fuels, such as coal, oil and natural gas.
 2. Biogas by products are used as organic fertilizer.

- (b) The Nuclear power has contributed in reducing the pressure on Conventional sources of energy as it is more efficient than burning fossil fuels as the amount of energy released from uranium per gram, is much more than that of conventional fuels such as oil or coal approx. 8,000 times more efficient in fact.

Answer 3.

- (i) The two ways in which agriculture sector is important for India are:
1. It is an important sector of Indian economy as it contributes about 20.19% according to Ministry of Agriculture Sector 2021 to the total GDP.
 2. It provides the main source of food, income and employment to about 70% of the rural households.
- (ii) (a) The two agriculture seasons of India are:
Rabi (October -November to March-April)
Kharif (June-July to September-October)
- (b) The crops that grows in each of the season are :
Rabi—Wheat, oat, mustard, barley gram, linseed, potatoes
Kharif—Rice, maize, cotton, jowar, sugarcane, pulses, jute, bajra, ragi.
- (iii) (a) Alluvial soil rich in humus and loamy in texture with good structure and water holding capacity is ideal for wheat cultivation.
- (b) Uttar Pradesh is the largest producer of wheat in India.
- (c) Wheat is not grown in southern parts of India because the temperature require at the time of sowing wheat is 10-15 degree Celsius which is not possible in these regions. Wheat grows best in well drained loam and clay loam whereas southern India have laterite and red soil.
- (iv) (a) Assam is largest producer of tea in India.
- (b) Ginning is the process of removing the seeds and debris from cotton. The cotton gin machine separates cotton fibers from the seed bolls and dust particles which enable greater productivity than manual cotton separation.
- (c) Pruning is the method of cutting branches of tea bush. This method encourages the growth of tea shoots with softer leaves and to keep the plant about 1.2m high so that the leaves can be picked easily.

Answer 4.

- (i) Differentiate between public sector and private sector industry.

Public Sector Industry	Private Sector Industry
In public sector organisations are controlled and owned by the government.	In private sector organisations are owned and managed by the individuals and private company.
The public sector normally include services such as military, police, public transit, infrastructure care, health care etc.	The private sector includes designers, developers plumbers, small and medium size business etc.

- (ii) The two ways in which cotton textile industry is important for India are :
The industry is the second largest employer in the country after agriculture providing employment over 150 million people directly.
It contributes significantly to industrial production, 14% of total production of the industry comes from textile.
- (iii) (a) Rourkela steel plant is located in North Western tip of Odisha.
- (b) Germany helped India to establish this steel plant.
- (c) Rourkela steel plant of Odisha gets its iron ore from Sundargarh and Keonjhar district of Odisha.
- (iv) (a) The benefits of using petrochemical products are :
Petrochemical products are economical and cost effective as they are produced on a large scale. They are durable as compared to the traditional agricultural product and raw material is easily available.
- (b) Electronic industry with mass scale integration process has produced computers, servers, displays, TVs, cameras, telephone exchanges etc. It has enabled to capture and broadcast News

advertisements, cinemas etc. to a large section of population over the country and overseas. Thus revolutionizing the entertainment sector over the masses.

Answer 5.

- (i) The two advantages of using waterways are:
- (a) It is beneficial to transport heavy and bulky material on a large scale. In this way it is important for foreign trade.
 - (b) It is the most inexpensive means of transportation.
 - (c) It is eco-friendly mode of transportation. *(any 2 points)*
- (ii) The difference between national highway and state highway is.

National Highway	State Highway
The major roads constructed and maintained by central government are known as National highways.	The major roads constructed and maintained by state government are known as State highways.
The important roads connected by national highways are state capitals, industrial centers, major ports and foreign highways.	The roads connected by state highways are state capitals to the district headquarters and other major cities in the state.

- (iii) The three benefits of Golden quadrilateral are :
- (a) It provides faster transport networks between major cities and ports.
 - (b) It provides smoother movements of goods and people within the country.
 - (c) It enables industrial development and job creation in smaller towns through access to varied markets.
- (iv) The three disadvantages of using air transport are:
1. Air transport is a costly service. Its operational cost is very high.
 2. Air transport is prone to accidents as a small mistake can be very dangerous to passengers.
 3. Air transport can carry small tonnage but it has high freight charges.
 4. There is a whole variety of materials not suitable for such transport example explosives inflammable gases, batteries, solid and liquid fuels.
 5. Air transport runs on petroleum which is a nonrenewable source of energy. *(any 3 points)*

Answer 6.

- (i) There is a need for waste management in India because:
Waste management reduces the effect of waste on the environment, health and so on.
Waste management helps to reduce the hazardous materials from environment thus preventing from spreading hazardous diseases and improves public and community health conditions.
- (ii) Segregation of waste or sorting of wastes into categories like hazardous waste, biodegradable waste and non biodegradable wastes etc., helps in preventing toxic wastes from entering the municipal sewage connected to rivers. This method helps save the life-forms living in the rivers and maintains a healthy ecological balance too. Segregation helps the authorized waste collectors to dispose the hazardous waste quickly and safely.
- (iii) The three ways that are used to reduce waste in India are:
1. Contribution of Swachh Bharat Abhiyan towards waste disposal is to adopt the 3Rs that is Reduce, Reuse and Recycle.
 2. Composting in the kitchen and yards. Food scraps and yard debris are composted into fertilizers, replenishing the soil too.
 3. By avoiding even single use plastic and non-biodegradable material for e.g. Food and drink containers.
- (iv) The three reasons why the dumping of waste may be harmful are:
1. The chemicals that are disposed by dumping them into our waterways like streams, rivers and aquifers make it unsafe to use for drinking and agricultural purposes.
 2. Dumping makes the waste rot and decompose producing harmful gases like CO₂ and methane both of which are greenhouse gases contributing to global warming.
- Open dumping also provides a place for germs, insects and other vectors to grow and spread diseases.

ICSE SEMESTER 2 EXAMINATION

SAMPLE PAPER - 1

GEOGRAPHY

H.C.G. - Paper – 2

Maximum Marks: 40

Time allowed: One and a half hours

Answers to this Paper must be written on the paper provided separately.

You will not be allowed to write during the first 10 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

*Attempt **all** questions from **Section A** and **any three** questions from **Section B**.*

Section-A (Attempt all questions)

Question 1.

On the outline map of India provided mark and name the following:



- | | |
|----------------------------------|--|
| (i) The Himalayas | (vi) Allahabad (Prayagraj) |
| (ii) Coromandel | (vii) State with highest density of population |
| (iii) Kosi | (viii) Tungabhadra |
| (iv) Karakoram Pass | (ix) Andaman Sea |
| (v) Standard Meridian (82° 30'E) | (x) Godavari |

Section-B (Attempt any three questions from this Section)

Question 2.

- (i) (a) Why is Copper used to make electric wires?
- (b) Why is India's location advantageous for the generation of solar power?
- (ii) Name two leading states producing Manganese.
- (iii) With reference to Iron Ore answer the following questions:
 - (a) Name two varieties of iron ore used in industry.
 - (b) How is the low grade iron ore utilised?
- (iv) (a) Name two industries that use a high quantity of coal.
- (b) Name one important area that has large coal deposits in the states of Jharkhand and West Bengal.

Question 3.

- (i) Why is agriculture important in India ? Name the two main agricultural seasons of India.
- (ii) (a) What is Shifting cultivation?
- (b) Define the term Oil cake.
- (iii) With reference to the cultivation of tea, answer the following:
 - (a) Why is tea grown on hill slopes ?
 - (b) Why tea bushes have to be pruned at regular intervals ?
 - (c) Why are women mostly employed in the tea plantation?
- (iv) (a) How has farm fragmentation become a major problem of agriculture of India?
- (b) Mention any two features of plantation farming by stating two examples.
- (c) Mention any one difference in the geographical condition and cultivation of rice and wheat.

Question 4.

- (i) Differentiate between Mineral-based industry and Agro-based industry giving one example for each.
- (ii) State two conditions necessary for the setting up of a heavy engineering industry.
- (iii) With which large scale industry would you identify the following manufacturing centres ?
 - (a) Kanpur
 - (b) Rourkela
 - (c) Pune
- (iv) (a) Why is Kolkata an important cotton manufacturing centre even though West Bengal is not a leading producer of cotton.
- (b) Name one integrated iron and steel plant in the private sector. Where does it obtain its iron and coal from?

Question 5.

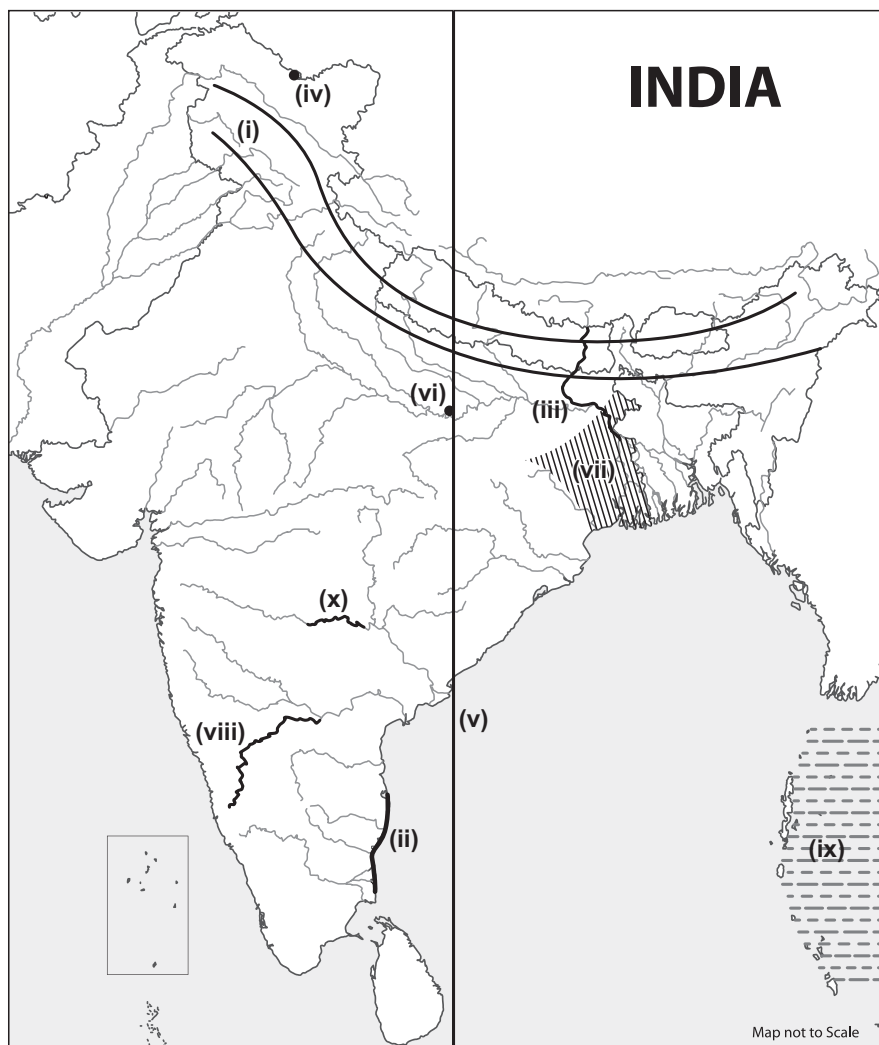
- (i) Roadways are always considered more important than any other means of transportation. Give two reasons to support the statement.
- (ii) Differentiate between an expressway and a highway.
- (iii) What is the Golden Quadrilateral ? Mention any two ways in which it will help in the economic development of the country ?
- (iv) Mention two advantages and one disadvantage of waterways.

Question 6.

- (i) How can waste be reused ? Explain with the help of an example.
- (ii) How does Waste accumulation affect the environment ? Give any two examples.
- (iii) What are Biodegradable Waste ? Mention any two sources of waste.
- (iv) Explain briefly the meaning of the following terms : Composting, Incineration and Segregation

Section-A

Answer 1.



Section-B

Answer 2.

- (i) (a) Copper is a good electrical conductor so, it is used in the electrical industry mainly to make copper wires.
- (b) India lies between 8°N and 37°N with the Tropic of Cancer running through it and so receives a lot of sunlight with 300 clear days in a year. Thus, India's location is advantageous for the generation of solar power.
- (ii) Madhya Pradesh and Maharashtra as per the date of 2018-19 are the two leading states producing Manganese in India.
- (iii) (a) Haematite and Magnetite are two important iron ores.
- (b) The inferior variety of iron is often used in manufacturing sponge iron and converted into pellets and then exported.

- (iv) (a) Two industries that use high quantity of coal are:
Iron and Steel Industry and the cement industries.
- (b) Coal Centre in Jharkhand – Jharia, in West Bengal – Raniganj.

Answer 3.

- (i) 1. Agriculture is important in India as it provides food for our ever expanding population and fodder for our livestock. It provides employment to millions of people.
2. Rabi and Kharif seasons are the two main agricultural seasons of India.
- (ii) (a) **Shifting cultivation or slash and burn or jhumming** : It is mostly practiced in North-East India. In this method of cultivation patch of forest land is cleared and crops are grown. After 2-3 years when the fertility of the soil is exhausted, land is abandoned and the farmers moved to a fresh piece of land and the process continues.
- (b) **Oil cake** : After extraction of oil from the oil seeds, the left over residue is known as oil cake which can be used as an important cattle feed and organic manure.
- (iii) (a) Tea is grown on hill slopes as the roots of tea bushes cannot tolerate stagnant water and the hill slopes drain away the water helping the tea bushes to grow properly.
- (b) Tea bushes have to be pruned at regular intervals to encourage the growth of new leaves and to keep the height of the bushes low for the women who do the plucking of the tea leaves.
- (c) The women are mostly employed in the tea plantations as they are the source of cheap and skilled labour to facilitate plucking of tea leaves.
- (iv) (a) Farm fragmentation reduces the size of farm on which it is not possible to use harvesters or other farm machinery. This results in the large scale wastage of fertile land and labour, thus it is one of the main problem of agriculture of India.
- (b) In Plantation Farming a single crop is grown on a large estate with modern and scientific techniques mainly for trade.
- It is a labour intensive method of farming and requires excellent managerial skills, technical knowledge of how the huge capital investment should be done. Example : Tea, Coffee, Coconut, Rubber, etc. (any two)

(c)	Rice	Wheat
1.	It is a Kharif crop sown in June and harvested in October.	It is a Rabi crop sown in October-November and harvested in March-April.
2.	During ripening stage the temperature should be 18°C–32°C Mean temperature should be 24°C. Rice needs more than 150 cm of annual rainfall.	Wheat needs a temperature of about 10°C–15°C during the period of growth and 20°–25°C during harvest. About 50 cm – 100 cm annual rainfall is ideal.
3.	Harvested by hand.	Harvesters are used. (any one)

Answer 4.

- (i) Mineral-based industry depends on the minerals for their raw material, e.g., iron and steel industry. Agro-based industry depends on the agricultural products for their raw material, e.g., jute industry, sugar industry etc.
- (ii) Two conditions required for setting up of a heavy engineering industry are as follows :
- (a) Availability of heavy and bulky raw materials like iron ore.
- (b) Large capital investment.
- (iii) (a) **Kanpur** – Sugar industry
- (b) **Rourkela** – Iron and steel plant
- (c) **Pune** – Cotton textile industry
- (iv) (a) The hot and humid climate of Kolkata facilitates the spinning of yarn of finer cotton. It has soft water from river Ganga for bleaching and dying, sufficient power supply, cheap labour and excellent means of transportation.
- (b) **Tata Iron and Steel Company**: It obtains iron ore from Singhbhum in Jharkhand and Mayurbhanj, and Bonai in Odisha. Coal is secured from Jharia in Jharkhand.

Answer 5.

- (i) Roadways are considered more important because roads can be constructed in remote areas, difficult terrain, high altitudes and steep slopes where no other means of transport can reach. Roads provide door to door service. They are quicker and safe means of transport, thus the cost of transportation is reduced considerably.
- (ii) One major difference between a highway and an Expressway is that a highway is a high speed road connecting two or more cities, while an Expressway is a very high speed highway that has limited or controlled access for two wheelers and three wheelers, but has features like lane dividers and access ramps to provide a pleasing motoring experience at high speed to motorists.
- (iii) **The Golden Quadrilateral is a highway network connecting India's four largest metropolises:** Delhi, Mumbai, Chennai and Kolkata. The project will help industrial development by easing the process of supply of raw materials. It will also help to connect many remote areas with the main cities.
- (iv) The two advantages of water transport are :
 - 1. It is suitable for carrying heavy and bulky goods.
 - 2. It is fuel efficient and environment friendly mode of transport.

Disadvantages: The seasonal rivers of peninsular India are not navigable. It is the slow means of transport .

Due to silting of river beds and diversion of water for irrigation canals the river beds have become shallow so, navigation is not possible in all rivers. (any one)

Answer 6.

- (i) Waste can be reused by recycling it and making new products from it e.g., shoes from old tyres, water bags from leather etc.
- (ii) Waste accumulation pollutes air, water and soil.

It degenerates the landscape, and chokes the drainage system.

It creates health problems like cholera, dysentery, typhoid, etc., due to growth of bacteria in the water.
- (iii) It is a waste which decomposes through the actions of bacteria, fungi and other living organisms. Various sources of waste are :
 - 1. Domestic waste
 - 2. Industrial waste
 - 3. Agricultural waste
 - 4. Municipal waste (Any two)
- (iv) **Composting :** It is a process where biodegradable organic wastes like tree leaves, vegetable peel and discarded food items are converted into useful manure.

Incineration: It involves burning of waste at a very high temperature and are fed into an incineration chamber and combustion destroys the organic compound.

Segregation: The waste from residential areas, hotels, restaurants, office complexes and commercial areas must be segregated at source into different categories of biodegradable, non-biodegradable, biomedical, toxic and non-toxic wastes. The process of doing so is called segregation.

□□

ICSE Paper 2017

Geography

- Answers to this Paper must be written on the paper provided separately.
 - You will not be allowed to write during the first 15 minutes.
 - This time is to be spent in reading the question paper.
 - The time given at the head of this Paper is the time allowed for writing the answers.
 - Attempt seven questions in all.
 - Part I is compulsory. All questions from Part I are to be attempted.
 - A total of five questions are to be attempted from Part II.
 - The intended marks for questions or parts of questions are given in brackets [].
 - To be supplied with this Paper: Survey of India Map Sheet No. 45D/10
 - And 20 cm of twine.
-

NOTE:

1. In all Map Work, make wise use of arrows to avoid overcrowding of the map.
2. The extract of Survey of India Map Sheet No. 45D/10 must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the paper.
3. The Map given at the end of this question paper must be detached, and after marking, must be fastened to your answer booklet.
4. All sub-sections of the questions attempted must be answered in the correct serial order.
5. All working including rough work should be done on the same answer sheet which is used to answer the rest of the paper.

Part-I [30 Marks]

(Attempt ALL Questions from this part)

Question 1.

Study the extract of the Survey of India Map sheet No. 45D/10 and answer the following questions:

(a) Give the six figure grid reference for: [2]

1. The highest point in this map extract.

2. Surveyed tree north of Rampura Khera.

Answer:

1. 088065
2. 072073

(b) On which bank of Sukli Nadi lies: [2]

1. Butri
2. Padrugarh [2]

Answer:

1. North – West
2. North – East

(c) Differentiate between the drainage pattern shown in grid square: [2]

1. 0704
2. 0705

Answer:

Grid 0704 has Trellis pattern whereas 0705 has radial drainage pattern.

(d) The region in this map extract receives seasonal rainfall. Give two reasons for your answer. [2]

Answer:

1. River, wells and tanks are dry.
2. Vegetation – fairly dense scrub.

(e) Calculate the distance in km between settlement Bhatana and Makawal along the cart track. [2]

Answer:

Indirect distance = 12 cm

1cm on the map represents = 500

12cm on the map represent = 500

(f) State the Compass direction of the following: [2]

1. Dattani from Marol.
2. Dhavli from Makawal.

Answer:

1. South – East
2. North – East

(g) 1. Mention a social activity of people living in Marol. [2]

2. What is the main occupation of the people living in this region?

Answer:

1. Monthly Fair
2. Agriculture – Yellow wash

(h) What do you understand by: [2]

1. The black broken line in 0807
2. The vertical black line close to Easting 10

Answer:

1. Disappearing drainage
2. Longitude line 35°

(i) What is the main source of water supply to Bhatana? Give a reason for your answer. [2]

Answer:

Tank

(j) 1. Name one natural feature in the grid square 0905. [2]

2. Identify one man made feature in the grid square 1003.

Answer:

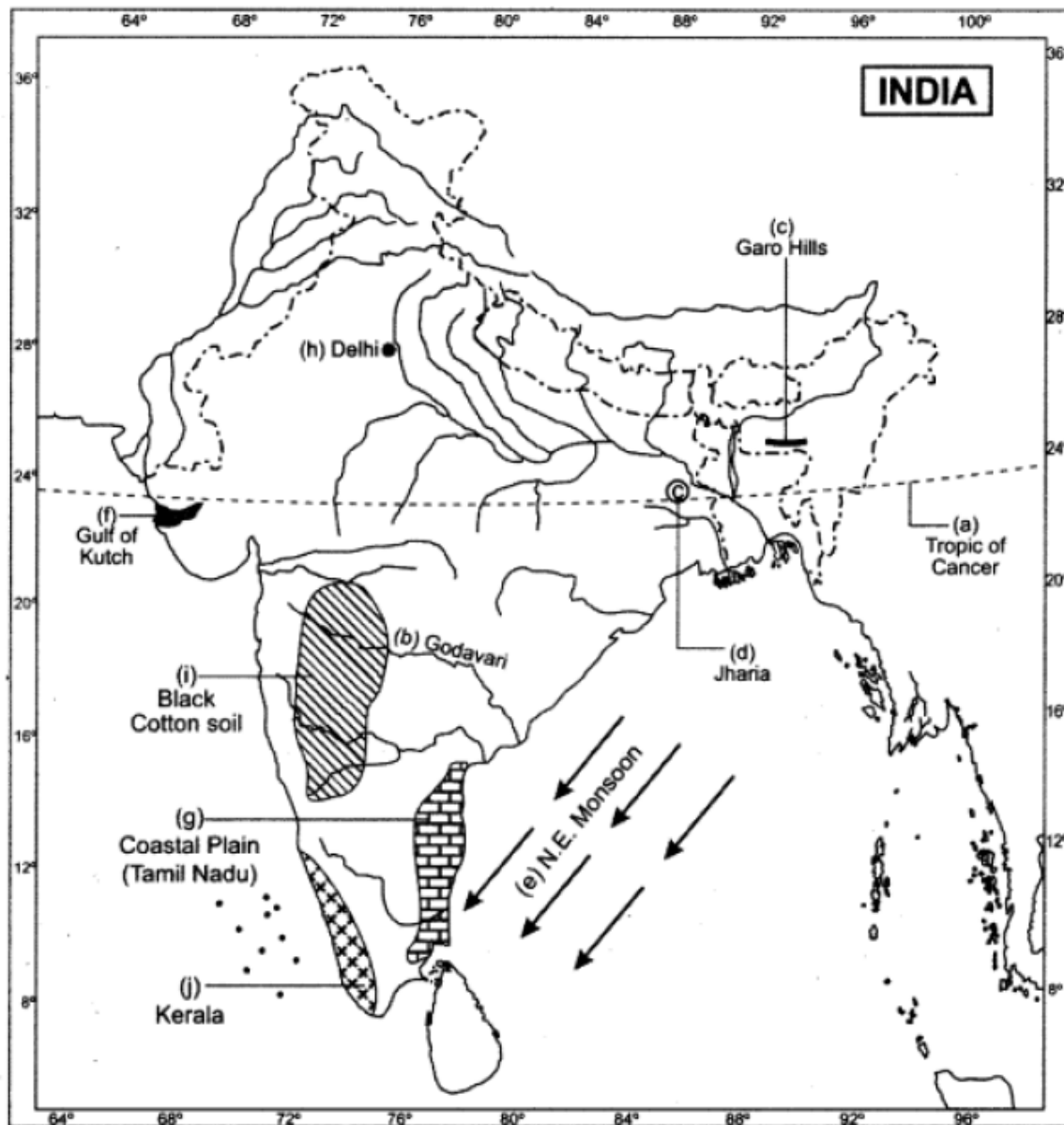
1. Cause way
2. Post office

Question 2.

On the outline map of India provided:

- (a) Draw and name the Tropic of Cancer. [1]
- (b) Label the river Godavari. [1]
- (c) Mark and name the Garo Hills. [1]
- (d) Mark C on the coal fields in Jharia. [1]
- (e) Mark with an arrow and name the NE monsoon over the Bay of Bengal. [1]
- (f) Shade and name the Gulf of Kutch. [1]
- (g) Shade and name the coastal plain that receives rainfall in October-November. [1]
- (h) Mark with a dot and name Delhi. [1]
- (i) Shade a region with Black Cotton Soil. [1]
- (j) Use an arrow to point at a densely populated state in South India. [1]

Answer:



Part II [50 Marks]

Attempt any five questions from this part

Question 3.

(a) Mention the four seasons that prevail in India stating the months for each. [2]

Answer:

1. The cold weather season starts in November and continues till March.

2. The hot weather season start in March and ends in May.
3. The season of the advancing monsoon starts in June and lasts until September.
4. The season of the retreating monsoon starts in October and November.

(b) State the agricultural benefits derived from : [2]

1. The Westerly Depressions in Punjab.
2. The Kalbaisakhi in Assam.

Answer:

1. These depressions are very useful for wheat, a major crop of Punjab.
2. These local winds are accompanied by thunderstorms and bring rainfall. This rain is good for jute and rice.

(c) Give a reason for each of the following: [3]

1. Kolkata receives heavier rain than Lucknow.
2. The Summer Monsoon winds blow over the Arabian Sea from the Southwest.
3. Thar is a desert.

Answer:

1. Kolkata is located near the coast whereas Lucknow is far from coast. Monsoon winds get dry as the distance from the sea increases.
2. The South-East Trades are attracted towards India due to low pressure prevailing on the land mass. After crossing the Equator, they are deflected towards the right due to Coriolis Effect and blow into India as South -West Monsoon.
3. Thar is a desert because of scanty rainfall. The region receives scanty rainfall because the Aravali range is parallel to the direction of the prevailing winds, so it does not offer any obstacles in the way of winds.

(d) Study the climatic data given below and answer the questions that follow: [3]

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Temp. °C	12.0	25.5	26.3	27.1	30.0	36.2	36.0	35.9	30.3	28.4	21.0	16.6
Rainfall cm	1.5	0.1	0.0	1.4	1.1	21.0	25.3	27.2	24.0	9.4	1.5	0.4

1. What is the annual range temperature of the station?
2. What is the total annual rainfall experienced by the station?
3. Why would it be correct to presume that the station lies in the interior and not on the coast?

Answer:

1. $36.2^{\circ}\text{C} - 12^{\circ}\text{C} = 24.2^{\circ}\text{C}$
2. $1.5 + 0.1 + 0.0 + 1.4 + 1.1 + 21.0 + 25.3 + 27.2 + 24.0 + 9.4 + 1.5 + 0.4 = 112.9 \text{ cm}$
3. Temperature range is very high so we can conclude the station is away from the equable effect.

Question 4.

(a) Mention two differences between Alluvial Soil and Black Cotton Soil. [2]

Answer:

Alluvial Soil	Black Soil
1. Alluvial soil is very fertile as it is rich in mineral nutrients like potash and lime. 2. Most of alluvial soil is derived from the sediments deposited by rivers.	1. The black soils are made of extremely fine material, i. e., clayey material. 2. The soil is well-known for its capacity to hold moisture.

(b) Name an area in India in which each of the following processes take place: [2]

1. Sheet erosion
2. Gully erosion

Answer:

1. Hilly areas of Uttarakhand and Himachal Pradesh
2. Madhya Pradesh

(c) What is soil conservation? State a method of soil conservation in the: [3]

1. Arid and Semi-Arid region.
2. River valleys prone to flood.

Answer:

Soil erosion is the removal of soil by the forces of nature, particularly wind and water.

Soil erosion mainly takes place due to man's activities such as deforestation, overgrazing of cattle, faulty methods of cultivation.

1. Afforestation, Restricting grazing of animals
2. Constructing dams

(d) Name the soil which: [3]

1. Is good for cultivation of sugarcane.
2. is acidic in nature.
3. occurs exsitu.

Answer:

1. Alluvial and Black soil
2. Laterite
3. Alluvial

Question 5.

(a) How do trees in the Tropical desert forests adapt themselves to the dry climate? [2]

Answer:

Trees remain small, it saves surface through which water evaporates.

- Get round and develop a green cylindrical stems which helps to perform photosynthesis.
- Develop an extended root system close to the surface and still collect a lot of water during scanty rainfall.

(b) Name the tree as per its characteristics given below: [2]

1. The wood is hard and suitable for ship building.
2. The stilt roots are Underwater during high tide.

Answer:

1. Rosewood
2. Mangroves trees

(c) Explain why the forest cover in India is shrinking. [3]

Answer:

1. Overutilisation of forests: In the earlier days, man's needs were limited. He was dependent on forests only for a few things, although a lot of things can be obtained from forests. Forests are being used to fulfil man's needs directly and indirectly. We are obtaining wood, barks, leaves, rubber, medicine, dyes, food, fuel, fodder, etc., from forests.

2. Colonial Plans: The greatest damage inflicted on Indian forests was during the colonial period due to the expansion of the railways, agriculture, commercial and scientific forestry and mining activities.

3. Agricultural expansion: Even after independence, agricultural expansion continues to be one of the major causes of depletion. Between 1951 and 1980, according to the Forest Survey of India, over 26,200 sq. km. of forest areas were converted into agricultural lands all over India.

(d) Name the natural vegetation found in the following regions: [3]

1. The western slopes of the Western Ghats.
2. The Nilgiris.
3. Western Rajasthan.

Answer:

1. Tropical Evergreen Forests
2. Tropical Evergreen Forests and Tropical Desert
3. Tropical Desert

Question 6.

(a) Give a reason for the significance of irrigation in : [2]

1. Punjab.
2. Rajasthan.

Answer:

1. Punjab is an agriculture state so lot of water is required for irrigation.
2. Rajasthan is a dry state so irrigation is required to cultivate the crop and drinking.

(b) Name a state where: [2]

1. Tube wells are common.

2. Tank irrigation is popular.

Answer:

1. Maharashtra
2. Tamil Nadu

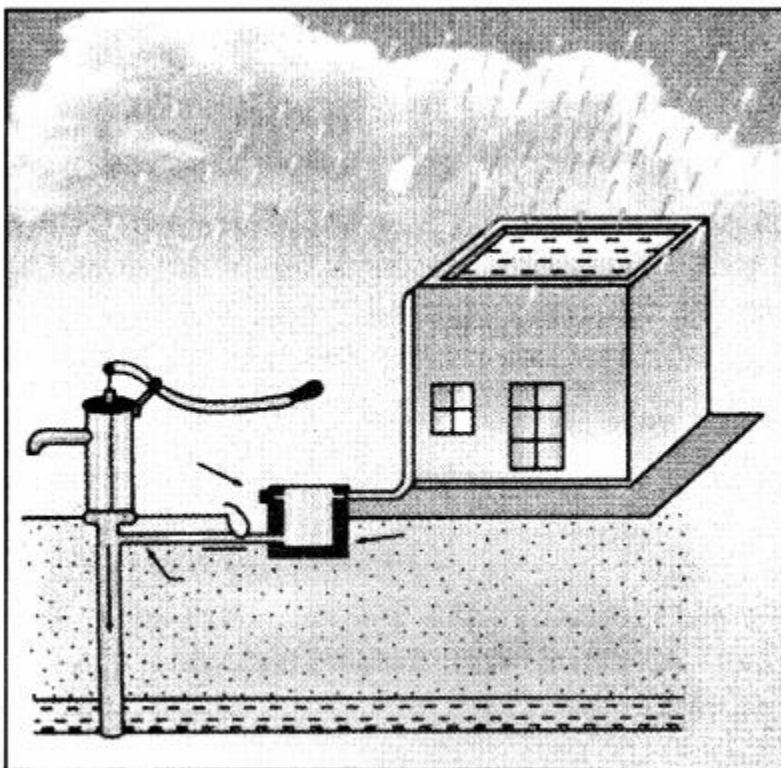
(c) Give one geographical reason for each of the following : [3]

1. Sprinkler irrigation is practiced in arid and semi-arid regions.
2. A tube well should be installed in a fertile and productive region.
3. Canal irrigation is more suitable in the Northern Plains.

Answer:

1. To minimize the loss of water.
2. So that there is demand for irrigation and the cost involved in the construction and operation of the tube well can be recovered by the increased farm production.
3. Canal irrigation is suitable for Northern India because
 - Low relief area
 - Even surface so digging is easy
 - Deep fertile soil which helps in recovering the cost of construction of canals.

(d) Study the diagram below and answer the questions that follow: [3]



1. Name the activity shown in the diagram.
2. Give two objectives of the activity named in (d) (i).

Answer:

1. Rain water harvesting
2. To overcome the inadequacy of surface water to meet our demands.
To check decline in groundwater levels.

Question 7.

(a) Give the names of four important types of iron ore found in India. [2]

Answer:

Magnetite, Hematite, Limonite and Siderite.

(b) Name the following: [2]

1. An offshore oil field in the Gulf of Cambay.
2. An oil refinery in Bihar.

Answer:

1. Mumbai High
2. IOC

(c)

1. Name the state that produces the largest amount of limestone. [3]
2. State two uses of limestone.

Answer:

1. Madhya Pradesh
2. It is a basic input in the cement industry.
It is used in the production of Portland cement.

(d) State an important industrial use of : [3]

1. Manganese
2. Coal
3. Aluminum

Answer:

1. Iron and Steel manufacturing
2. Iron and Steel manufacturing
3. Use to making pots and pans because good conductor of heat.

Question 8.

(a) What is Mixed farming? Mention any one benefit of Mixed farming. [2]

Answer:

Mixed farming is a technique of farming under which equal importance is given to rearing of animals along with cultivation of crops.

Advantage: Farmers remain busy in their work throughout the year.

(b) Give the Geographical requirements for the cultivation of Sugarcane. [2]

Answer:

Temperature: 20°C to 30°C, hot and moist climate.

Rainfall: 75 cm to 150 cm and grows best on irrigated land.

Soil: Well drained fertile soil. It also requires plenty of manure and fertilizers.

(c) Explain the following terms and name the crop with which each is associated: [3]

1. Retting
2. Ratooning
3. Ginning

Answer:

1. Retting is associated with jute. Retting is a microbiological process which loosens the outer bark and makes it easier to remove fibres from the stalk. Plant is dipped in stagnant water for 2-3 weeks in order to soften the outer bark.

2. Ratooning is a method of sugarcane cultivation. In this method the cane is cut close to the ground. After sometime the stem begins to grow again and produces a second crop called ratoon.

3. It is associated with cotton. Ginning is a process by which seeds are separated from the fibre.

(d) Give geographical reasons for the following: [3]

1. Regular pruning is essential for tea bushes.
2. Coffee beans are roasted.
3. Millets are known as dry crops.

Answer:

1. Pruning is done to keep the shrub at a convenient height of about 40 to 50 cm. It encourages the growth of new shoots with softer leaves.

2. Roasting is done to improve the flavour and taste of coffee. Roasting gives brown colour and pleasing aroma.

3. Millets need rainfall ranging between 50 cm – 120 cm, that is, they do not need much rainfall. Because of this feature, millets are called 'DRY' crops.

Question 9.

(a) Differentiate between Mineral-based Industry and Agro-based industry giving one example for each. [2]

Answer:

<i>Agro-based Industries</i>	<i>Mineral-based Industries</i>
1. These industries derive raw material from agriculture.	1. These industries derive their raw material from minerals.
2. They provide employment in rural areas.	2. They provide employment both in rural and urban area.
3. They mostly produce consumer goods.	3. These industries produce both consumer and value based goods.
4. Example : Sugar, jute, textile, vegetable oil.	4. Example : Iron and steel, engineering industry, ship building, machine tools.

(b) 'Though Uttar Pradesh has the largest number of sugar mills yet Maharashtra is the largest producer of sugar'. Give any two reasons to justify the statement. [2]

Answer:

- Climate: Sugarcane is a tropical crop. Peninsular India has tropical climate which gives higher yield per unit area as compared to north India.
- Higher sucrose: Due to favourable climatic conditions, the sucrose content is also higher in tropical variety of sugarcane in the south.
- Long crushing period: The crushing season is also much longer in the south than in the north. For example, crushing season is of nearly four months in the north. Whereas it is of nearly 7-8 months in the south.

(c) Give the geographic term for each of the following: [3]

1. Non-mulberry silk produced in Madhya Pradesh.
2. Rejected cane after crushing.
3. The rearing of silk worms to obtain silk.

Answer:

1. Tussar Silk
2. Bagasse
3. Sericulture

(d) With reference to the cotton textile industry answer the following questions: [3]

1. Give two reasons why Mumbai is an important cotton textile industry.
2. Mention two more important centres of cotton textile industry in India.

Answer:

1. (a) Raw material is grown in Maharashtra itself and is also easily available from neighbouring states of Gujarat and Madhya Pradesh.
(b) Humid climatic condition in Mumbai favours spinning of yarn.
(c) Cheap hydroelectric power is available.
2. Ahmadabad and Jamnagar

Question 10.

(a) 'The Iron and Steel industry constitutes the backbone of modern industrial economy.' Give two reasons to justify the statement. [2]

Answer:

Iron and steel industry is called the basic industry because :

- It is the industry which lays the foundation of rapid development of other industries such as heavy engineering, defence equipment, automobiles, aeroplanes, etc.
- It is also helpful in providing employment.

(b) 1. Name an Iron and Steel Industry set up in Orissa with the help of a famous German firm. [2]

2. From where does the industry named in b (i) get its iron ore and manganese?

Answer:

1. Rourkela
2. Iron ore – Bonaigarh, Mayurbhanj, Manganese – Barajamda

(c) Name a manufacturing centre for each of the following industries : [3]

- Aircraft
- HMT
- Railwaycoaches

Answer:

- Koraput
- Bengaluru
- Kapurthala

(d) Name two products each of the following industries: [3]

1. petrochemical industry
2. heavy engineering industry.
3. electronic industry.

Answer:

1. Synthetic fibers, plastics
2. Wrist watch, drilling machines
3. Computers, Television

Question 11.

(a) Mention two reasons why more people use railways rather than airways. [2]

Answer:

- Railway is cheap mode of transportation.
- Railway can carry bulky raw material.

(b) Why is inland waterways declining in its importance? Give two reasons for your answer. [2]

Answer:

- Water transport as a whole is much slower than its roads, rail or air competitors.
- It provides access to limited areas.

(c) What do you mean by the following: [3]

1. Sewage
2. Eutrophication
3. Recycling

Answer:

1. The waste water discharged from domestic premises like residences, institutions and commercial establishments is known as sewage.

2. The process by which a body of water acquires a high concentration of nutrients, especially phosphates and nitrates is known as eutrophication.

3. Recycling involves the collection of used and discarded materials, processing these materials and making them into new products. It reduces the amount of waste that is thrown into the community and the air fresher, to breathe.

(d) 'Methane is an air pollutant that causes Greenhouse effect.' Name three sources of this gas. [3]

Answer:

- Mining
- Landfills
- Wet lands

**ICSE Board
Class X Geography
Board Paper – 2019**

Time: 2 hrs

Total Marks: 80

Answers to this paper must be written on the paper provided separately.

You will **NOT** be allowed to write during the first 15 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this paper is the time allowed for writing the answers.

Attempt seven questions in all. Part I is compulsory. All questions from Part I are to be attempted. A total of five questions are to be attempted from Part II.

Intended marks for questions or part of questions are given in brackets []

Part I (30 Marks)

*Attempt **all** questions from this **Part***

Question I

Study the extract of the **Survey of India** Map sheet No **45D/10** and answer the following questions:

- (a) (i) Give the **six-figure** grid reference for the temple that is located to the south west of *Pithapura settlement*.
- (ii) Give the **four-figure** grid reference for a *settlement* where people of the region meet socially and for *trade* at least *once in a year*. [2]
- (b) (i) What is the *pattern of drainage* seen in the grid square **2118**?
- (ii) What is the *pattern of settlement* seen in the grid square **1923**? [2]
- (c) What do each of the two numbers (281 printed in black colour and 20 printed in red colour) in the grid square **1818** indicate? [2]
- (d) (i) Name any **two man-made** features in grid square **2419**.
- (ii) Name any **two natural features** in grid square **2118**. [2]
- (e) What is the significance of the following? [2]
 - (i) **Fire line** in grid square **2417**.
 - (ii) Water body found in grid square **2221**.
- (f) Calculate the **area** of the region between **16** and **19** Easting's and **18** and **22** Northings. Give your answer in **Kilometer square**. [2]
- (g) Give a reason for each of the following: [2]
 - (i) The water in some of the wells in north west quarter of the map is *not fit for drinking*.
 - (ii) The region near Anadra and Gulabganj has many *causeways*.
- (h) (i) What is the *main means of irrigation* used by people living in the area shown on the map?

(ii) What is the *main occupation* of the people of the region shown on the map? [2]

(i) Which according to you is the *most important settlement*? Give a reason to support your answer. [2]

(j) Name any two *means of transport* used by the people living in the area shown on the map extract. [2]

Solution 1:

(a) (i) 201214

(ii) Village Pamera 1622 or Village Malgaon 1520.

(b) (i) Radial

(ii) Nucleated or clustered.

(c) (i) 281 in Black → Spot height
20 in Red → Mile stone

(d) (i) Cart track, lined perennial well, houses.

(ii) Seasonal streams, hill Bhumi Magri.

(e) (i) Fireline → A clearing made in the forest to prevent the spread of fire.

(ii) It is the Tokra reservoir/ Talao which provides the supply of water for domestic as well as agriculture use.

(f) Distance on the map between eastings 16 to 19 = 6 cm.

Distance on the map between northings 18 to 22 = 8 cm.

As per scale, 2 cm on the map is equal to 1 km on the ground.

6 cm on the map is equal to 1km on the ground ie, $\frac{1}{2} \times 6 = 3km$

8 cm on the map is equal to 1km on the ground ie, $\frac{1}{2} \times 8 = 4km$

Thus, Area = 3km × 4km

= 12 sq km.

(g) (i) The water in the wells in the north-west quarter of the map is brackish. Meaning that the water in these wells is salty. Thus, it is not suitable for drinking.

(ii) Area between Gulabganj and Anadra is a region of scanty rainfall with a number of seasonal streams. So, elevated roads across minor streams are possible- leading to the region having many cause ways.

(h) (i) Canal and lined perennial wells.

(ii) Agriculture.

- (i) Anadra is the most important settlement as it has a post and a telegraph office, dak Bungalow, police chowki and a dispensary.
- (j) Metalled Roads and Cart tracks.

Question 2

On the outline map of India provided:

- (a) Shade and label the *Gangetic Plain*. [1]
- (b) Shade and label an area of laterite soil **in North India**. [1]
- (c) Mark and label the *Karakoram Montanins*. [1]
- (d) Mark and name the *Palk Strait*. [1]
- (e) Shade and label the river *Cauveri*. [1]
- (f) Mark and name *Mumbai*. [1]
- (g) Mark and name the *Nathu La Pass*. [1]
- (h) Mark and name *Digboi*. [1]
- (i) Shade and name the *Deccan Platau*. [1]
- (j) Shade and label the river *Jhelum*. [1]

PART II (50 Marks)

Attempt **any five** questions from **this Part**

Question 3

- (a) (i) What type of wind is 'Monsoon'? What is the direction during summer?
- (ii) Mention **two** characteristics of the *Indian monsoon*. [2]
- (b) With reference to the summer season in India, answer the following questions:
- (i) Mention the duration of the summer season in India.
- (ii) What is the atmospheric pressure condition during summer season over the central part of India? [2]
- (c) Give a reason for each of the following:
- (i) Goa receives heavier rainfall than *Puducherry*
- (ii) *Mawsynram* receives the highest average annual rainfall.
- (iii) *Mangaluru* is cooler than Delhi in summer season. [3]
- (d) Study the data of distribution of temperature and rain for Station X and answer the questions that follow. [3]

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Temp °C	10	11	23	35	39	42	40	33	30	25	13	11
Rainfall Cm	2	1	0	5	15	62	71	81	59	12	10	3

Solution 3:

- (a) (i) Monsoon wind is a periodic wind. It's direction during summer is South West to North East.
- (ii) The characteristics of Indian monsoon are:
1. South west monsoon is erratic in nature.
 2. Distribution of rainfall is uneven.
 3. It is largely controlled by orography, that is, the effects caused due to the presence of Himalayas and the Western ghats on the amount of rainfall.
- (b) (i) The summer season or hot dry season in India commences in March and continues till the end of May.
- (ii) During the summer season as the whole country simmers in heat, the low pressure conditions over the central part of India become more severe and a low pressure trough develops between Thar Desert and the Chotanagpur Plateau.
- (c) Goa is located on the Western coast of India. It receives rainfall from the Arabian Sea branch of SW monsoon while Puducherry is located on the Eastern coast and gets only 40 cm of rainfall from the Arabian Sea branch of southwest monsoon. Bay of Bengal branch runs parallel to the SE coast of India and thus, brings no rain to Puducherry. So, Goa receives heavier rainfall than Puducherry.
- (ii) Mawsynram is situated along the edge of the Meghalaya plateau and stands at the end of a funnel-shaped valley, on the windward side of the Khasi hills which acts as a trap for the rain-

bearing Bay of Bengal branch of the SW monsoon forcing them to shed huge amounts of moisture.

(iii) Mangaluru is situated on the western coast and thus, enjoy the influence of the sea and stays relatively cooler on the other hand, Delhi lies in the interior and experience continental type of climate. So summers in Delhi are very hot.

- (d) (i) Station x is situated in the interior parts of the country.
- (ii) 32 cm
- (iii) SW monsoon wind.

Question 4

(a) (i) Name the Indian soil which is formed due to the *weathering of basic igneous rocks*.

(ii) Name *two states* of India where this type of soil is found. [2]

(b) Name the following: [2]

(i) An important *transported soil* of India.

(ii) Soil that is *rich in iron oxide*.

(c) Give a geographical reason for each of the following: [3]

(i) *Terrace farming* is an ideal soil conservation method for *hilly regions*.

(ii) *Dry farming* is preferred in areas with *red soil*.

(iii) *Wind* is a common agent of soil erosion in arid regions.

(d) Briefly answer the following: [3]

(i) Mention one way in which man is responsible for soil erosion.

(ii) How can deepening of the river bed help in preventing soil erosion?

(iii) Mention a physical characteristic of Laterite soil.

Solution 4:

(a) (i) Black Soil.

(ii) Maharashtra and Gujarat.

(b) (i) Alluvial Soil

(ii) Red Soil

(c) (i) Terraced farming checks erosion as it controls the direct flow of water down the slopes.

(ii) Regions that receives less than 75 cm of rainfall are suitable for dry farming. Crops like millets, pulse, oil seeds need less rainfall and grow well in red soil. So, dry farming is preferred in areas of red soil.

(iii) Arid regions are extensive flat lands with no or few vegetation cover. So, the dry winds are able to erode the upper soil surface which become loose due to lack of moisture.

(d) (i) Man's activities like construction work, ploughing, cutting down trees, quarrying, mining causes soil erosion.

- (ii) Much of the soil erosion by floods can be checked by deepening of the river bed. Deep river beds, as deep river beds can stop overflowing of river water or floods and can reduce the speed of the overflowing water. So, it can greatly help in preventing large scale soil erosion.
- (iii) Heavy rainfall washes away the top soil containing silica. So, the laterite soils lacks fertility due to 'leaching'. It is reddish brown in colour due to the presence of iron oxide and it is coarse and porous in nature.

Question 5

- (a) Give **two reasons** to explain as to why we *need to conserve* our forest resource. [2]
- (b) (i) Mention *two* conditions required for the growth of *Littoral Forest*.
- (ii) State **one characteristic** feature of the forest found in the *Nilgiri Hills*. [2]
- (c) (i) Give **two reasons** to explain as to why the *Tropical Evergreen Forests* are difficult to exploit for *commercial purpose*. [3]
- (ii) Name any **two trees** found in Tropical Evergreen forests.
- (d) Briefly explain each of the following: [3]
- (i) The trees in the Tropical Desert Forests have *stunted growth*.
- (ii) There is a *gradual increase* in the forests cover in India in recent times.
- (iii) The trees in *Monsoon Deciduous forests*, shed their leaves for about 6-8 weeks during March and April.

Solution 5:

- (a) The conservation of forest resources is essential for the survival of human being, wildlife and other species, as forests play an important role in the development of soil and enriching its fertility, conserving water in the sub-soil, absorbing insolation, causing rain, maintaining ecological balance, preventing floods and soil erosion.
- (b) (i) Conditions required for the growth of littoral forest are:
 1. Delta regions or creeks and estuaries which are prone to tidal influence.
 2. Temperature 26°C to 29 °C.
 3. Rainfall over 200cm.
- (ii) Mountain forests consist of mixed deciduous and coniferous trees in transition zone. The main tree is Eucalyptus. The forests are characterized by giant, multilayered species with luxuriant vegetation. The height of the trees go up to 150 feet or more supported by huge buttresses.
- (c) (i) Tropical Evergreen Forests are difficult to exploit due to :
 1. Dense undergrowth.
 2. Lack of transport facilities.
 3. Absence of trees found in pure stands.

4. Logs are heavy so, they do not float in the river. Thus, causing the cost of transportation to rise.

(ii) Rose wood, Ebony, Mahogany, Sisam.

(d) (i) The trees in the tropical desert have stunted growth due to constant wind and scarce water supply.

(ii) 1. There is a gradual increase in the forest cover due to programmes like 'Van- Mahotsava' under which all government employees' plant trees.

2. Due to Afforestation scheme in which trees are planted in Rajasthan, West U.P. and Kutch region.

3. Due to Reafforestation Scheme in which 2 saplings, are planted for every tree that is cut.

(iii) Trees in monsoon deciduous forests shed their leaves for about 6-8 weeks during March and April. To prevent transpiration and to preserve water for the dry months.

Question 6

(a) "*The modern means of irrigation are gaining popularity*". [2]

Give **two reasons** to justify this statement.

(b) Mention **two factors** that favour the development of tube well irrigation in Punjab. [2]

(c) Give a reason for each of the following: [3]

(i) Most of the South Indian states are ***not suitable*** for development of canal irrigation.

(ii) There is an urgent need for water conservation in India.

(iii) Development of irrigation is essential for the growth of the agriculture sector of India.

(d) Briefly explain the following terms: [3]

(i) Inundation canal.

(ii) Rooftop rainwater harvesting.

(iii) Surface water.

Solution 6:

(a) The modern means of irrigation like sprinkler or drip irrigation are by far the best methods for conserving water as:

1. There is no wastage of water due to seepage or evaporation.

2. High application efficiency.

3. Labour cost is less.

4. Prevents water pollution.

(b) The two factors for the development of tube well irrigation in Punjab are;

1. Soft alluvial soil facilitate digging as deep as required.

2. High water table with perennial water supply.

(c) (i) Most of the rivers in South India are non- perennial. Deccan plateau consisting of hard igneous and metamorphic rock making it difficult to dig. So, states in South India are not suitable for canal irrigation.

(ii) A fresh water resources such as rivers, lakes and ponds are drying up due to excessive use and climate change. Industrial development is leading to the pollution of fresh water bodies like lakes, river and ponds due to the increased usage of heavy metals, fertilizers and pesticides by industries, plantations and farmers. Ground water levels in urban areas are falling due to bore well and tube wells being dug deeper into the earth with water in the aquifer depleting faster than it is being replenished. Thus, with rising water scarcity and growing population there is an urgent need to conserve water in India for the future generations.

(iii) Only 30% of the cultivated area receives sufficient annual rainfall while 40% receives less than 75cm of annual rainfall.

1. Rabi crops need irrigation as most parts of India receives no rain during winter.
2. Some crops like rice, jute, sugarcane need more water. So, India needs enhanced irrigation facilities to get maximum yield from the same land.

(d) (i) Inundation canals are taken out from perennial rivers without any regulation system like weirs and barrages at their head to regulate the flow of the river. The supply of water comes only when the river is flooded in the lower level regions only. This type of irrigation is cheap and can also be useful in controlling floods.

(ii) Rooftop Rain water harvesting is the technique through which rain water is captured from the roof catchments and stored in reservoirs. This harvested rain water can be stored in sub-surface ground water reservoirs by adopting artificial recharge techniques to meet the household needs through storage tanks.

(iii) Surface water is available on the surface of the Earth in the form of rivers, lakes, ponds and canals. Rivers comprise of the most important source of surface water. Most of the Himalayan rivers are perennial while the rivers of the peninsular India are seasonal.

Question 7

(a) Give **two advantages** of using *bio-gas* as a source of power. [2]

(b) Name the following: [2]

(i) A **metallic mineral** for which the Balaghat district of Madhya Pradesh is famous.

(ii) The *Multi-purpose project* based on the River Sutlej.

(c) Give a reason for each of the following: [3]

(i) **Odisha** has benefitted greatly from the **Hirakud project**.

(ii) **Copper** is used to make **electric wires**.

(iii) India's location is advantageous for the generation of **solar power**.

(d) Briefly answer the following: [3]

(i) Name a *mineral* used to generate nuclear power.

(ii) Why is *petroleum* often referred to as "**liquid gold**"?

(iii) State **one disadvantage** of using coal as a source of power.

Solution 7:

(a) Bio-gas energy uses organic material and waste like agricultural waste and household waste for its production. So, it is a sustainable source of energy. Its usage as a source of power has many advantage such as:

1. The process emits far less greenhouse gases into the air than in fossil fuels.
2. It is cost effective.
3. It saves about 70 lakh tons of fuel wood and reduces dependence on fossil fuels.

(b) (i) Cooper
(ii) Bhakra Nagal Project.

(c) (i) Odisha has greatly benefited from the Hirakud project as the canals originating from the dam helps irrigate vast areas of agricultural land. The project also provides navigation facilities for the transportation of goods. The project also has two power houses, chipima power house and Hirakud power house which supply power to a number of industries thus, making a valuable contribution to the industrial development of Odisha as it is very rich in mineral resources like iron, bauxite and manganese, etc.

(ii) Copper is a good electrical conductor. So, it is used in the electrical industry mainly to make copper wire.

(iii) The Sun offer 'direct' and inexhaustible source of energy, especially in a tropical country like India, with over 300 days of clear sky that can be utilized to generate electrical energy. Thus, India's location is advantageous for the generation of solar power.

(d) (i) Uranium/ Plutonium/ Beryllium/ Thorium.

(ii) Petroleum is a fossil fuel, can be extracted easily at a low cost, and sold at a cheaper cost as compared to other sources of energy. It can generate up to 10,000 kilo calories of energy. It can be easily transported. So, it is known as 'liquid Gold'.

(iii) Using coal as a source of power requires burning it. Burning coal emits harmful waste like carbon dioxide, sulphuric acid, arsenic, ash, and nitrogen oxide and sulphur dioxide, increasing greenhouse gases into the atmosphere. It may also cause acid rain. Thus, causing severe harm to our environment.

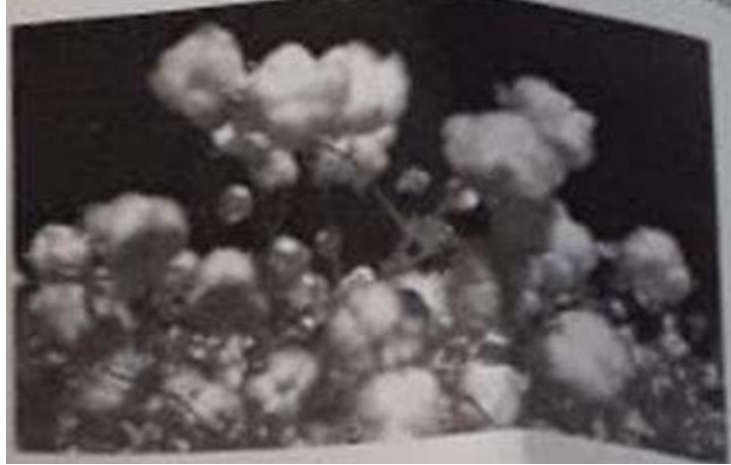
Question 8

(a) Mention two steps taken by the government to boost agricultural production in India. [2]

(b) (i) Name two varieties of millet grown in India. [2]

(ii) *What is the soil requirement for growing millet?*

(c) Study the picture given below and answer the questions that follows:



- (i) Mention the *climatic condition* that is suitable for the cultivation of this crop.
- (ii) Name the *state* that produces the *largest amount* of this crop.
- (iii) In which *cropping season* is this crop grown in India?
- (d) Give a geographical reason for each of the following ; [3]
 - (i) Cultivation of *wheat* is confined to the *northern part of India*.
 - (ii) Practicing *mixed farming* gives *security* to farmers.
 - (iii) *Ratoon* cropping is *gaining popularity* among sugarcane cultivations.

Solution 8:

- (a) Two steps are:
 1. Use of HYV seeds.
 2. Rural electrification.
 3. Supply of agricultural credit.
 4. Land reforms law.
 5. Irrigation facilities.
 6. Opening of agricultural universities.
- (b) (i) Jowar and Bajra.
- (ii) Millets do not have any special requirements as far as soil is concerned. Loamy, sandy, clayey deep regur and alluvial soil are best growing millets.
- (c) (i) The temperature should be in between 21°C to 27°C and should not be less than 20°C. The rainfall should be between 50-80 cm and should be well distributed as stagnant water and excessive rain can be harmful to the plant. The cotton crop needs 200 frost free days during the period of growth.
- (ii) Punjab.
- (iii) In North India it is a Rabi crop but in South India it is Kharif crop.

(d) (i) Wheat grows well in a cool climate with 50cm to 100cm of rainfall during the growing season. It needs an average temperature of 10°-15°C at the time of sowing and 20°-25°C during the harvesting period. North India enjoys this type of climate, whereas South India does not so, wheat cultivation is confined to North India only.

(ii) Cultivation of crops and rearing of livestock is done simultaneously in mixed farming. If crops fails, the farmers get income from the livestock. So, this give security to the farmers.

(iii) Ratoon cropping does not involve any extra expenditure for replanting the crop. It involves shorter maturation period. So, it is gaining popularity among sugarcane cultivators.

Question 9

(a) Where do the following *iron* and *steel plants* get their supply of **iron ore** from? [2]

(i) Bhilai Iron and Steel Plant.

(ii) Vishakhapatnam Steel Plant.

(b) '*Karnataka has developed as an important state for the growth of the Silk industry*'. Give **two reasons** to justify the statement. [2]

(c) With reference to **sugar industries** answer the following questions: [3]

(i) Why should these industries be located close to the sugarcane growing areas?

(ii) Name **two** by – products of the sugar industry.

(iii) Mention **one** leading sugar producing state in North India and **one** in South India.

(d) Give a reason for each of the following: [3]

(i) **Ahmedabad** is an important cotton *textile* producing centre in India.

(ii) Cottage industries are significant for our economy.

(iii) Petrochemical industries are usually located close to the oil refineries.

Solution 9:

(a) (i) Bhilai Iron and Steel Plant get iron ore from Dalli-Rajhara range.

(ii) Vishakhapatnam Steel Plant get iron ore from Bailadila mines in Chhattisgarh.

(b) Karnataka has developed as an important state for the growth of the silk industry for the following reason:

1. Availability of favorable climate for rearing of Silkworms throughout the year.

2. Availability of Mulberry plant which is raised as plantation bush.

3. Availability of soft water.

(c) (i) Sugarcane needs to be crushed within 24 to 48 hrs, otherwise, the sucrose content is reduced. So, the sugar industry should be located close to the sugarcane growing areas.

(ii) Molasses, Bagasses, Preemud.

(iii) North India---- Up/Punjab/Bihar/Haryana.

South India- Maharashtra/ Karnataka.

(d) (i) Ahmedabad is located right in the centre of the cotton producing area, it enjoys humid climate which is ideal for cotton thread it provides a huge ready market for cheaper cloth among the poor masses of India. It also has an advantage of both kandla (free trade zone) and Mumbai

port for export and import. So, Ahmedabad is an important cotton textile producing centre in India.

(ii) Cottage industries are significant for our economy in the following ways:

1. Cottage industries provide employment to a large number of people in India.
2. It also helps India to earn considerable amount of Foreign exchange.
3. It also stops rural to urban migration.

(iii) Petrochemical industry gets its raw materials from the oil refineries. So, they are located close to the oil refineries.

Question 10

(a) “Roadways are an important means of transport in India”. Give **two reasons** to justify the statement. [2]

(b) (i) Why are South Indian rivers **not ideal** for the inland water transport?

(ii) Mention **one** advantage of coastal shipping.

(c) Give a reason for each of the following: [3]

(i) Nearly seventy *percent* of Indians *do not* use air transport.

(ii) A *well-developed transport network* is important for industrial growth.

(iii) Water transport is not as popular as land transport in India.

(d) (i) “*The railway is an important means of transport as compared to airways.*” State

two reasons to support the statement.

(ii) Mention one disadvantage of rail transport.

Solution 10:

(a) Roadways are an important means of transport in India because:

- 1) Road construction can be undertaken in remote areas, difficult terrains, high altitudes and steep slopes.
- 2) It provide a link between the railways and the ports.

(b) (i) Rivers in South India flow in a rocky areas and have an irregular terrain with a number of waterfalls and sharp bends. So, the rivers are not suitable for inland water transport.

(ii) Coastal shipping is the most economical and environment friendly mode of transport as compared to railways and airways as it saves fuel, it reduces the burden on rail and road transport system and provides employment to thousand of people.

(c) (i) Air transport is very expensive . It tends to serve only a particular sector who can afford the exorbitant fares. These fares are normally beyond the reach of the common man. Thus, 70% of Indians cannot afford it.

(ii) A well –developed transport network is important as it is the lifeline for the economic development of the country. Transport links consumption to production and hinterland to the production centres. It also links the country with rest of the world. Thus, a well –developed transport network is important for the overall industrial growth of the country.

(iii) Water transport is a very slow means of transport as compared to land transport. In India there is always a chance of failure of monsoon which may result into a fall of water level in the rivers making navigation difficult whereas, land transport does not face any such seasonal

difficulties. Water transport is more risky as compared to land transport because there is always a danger of sinking of ships or boats. Thus, it is not as popular as land transport.

(d) (i) rail Transport is the cheapest mode of transport for bulky products like food grain, minerals, heavy defense equipment, etc. whereas, air transport is expensive for both passenger and freight. Rail transport helps to link the rural India with the urban cities, on the other hand air transport links only the major cities of the country to one another. Thus, railways is an important means of transport as compared to airways.

(ii) Railways are unsafe due to poor maintenance, frequent accidents, terror attacks and faulty repairs. Poor management, poor catering and lack of amenities at railway stations have resulted in an inefficient image of the railways in the eyes of the public.

Question 11

(a) What impact does the Waste accumulation have on the following? [2]

(i) Quality of air around us

(ii) Quality of water around us

(b) Mention **two ways** in which the decomposition of waste in open areas can affect human health. [2]

(c) (i) What can an individual do to *reduce* waste at home? [3]

(ii) Why must *segregation* of waste be done before disposal?

(iii) How has composting proven to be a great help in managing waste?

(d) Give a reason for each of the following : [3]

(i) Trees must be planted in the industrial areas.

(ii) Chemical fertilizers must be replaced by organic manure.

(iii) Plastic and polythene products must be banned.

Solution 11:

(a) (i) Quality of the air around us:

Over crowded urban areas generate excessive waste in form of large piles of garbage. This accumulated waste releases various pollutants into the air. Primary pollutants that are emitted directly into the air include carbon monoxide, sulphur dioxide, nitrogen oxide and SPM which lead to common air hazards such as acid rain, global warming, ozone depletion and smog formation.

(ii) Quality of water around us:

Industrial plants or manufactures release various pollutants such as arsenic, lead, mercury in the water bodies which when accumulated pollute the streams, rivers and oceans there by causing serious health hazards in humans as well as the aquatic life.

(b) Decomposition of waste in open areas can affect human health in the following ways:

1. Decomposition of waste in landfills releases various harmful gases such as methane that causes chemical poisoning among humans.

2. Landfills also attract all types of insects and rodents that spread various diseases.

(c) (i) 1. Instead of discarding house hold items one can reuse the items after repairing and polishing them.

2. Household waste like vegetable peels, garden waste etc. can be reduced by making compost.

3. Use products which do not generate too much waste, are ecofriendly and biodegradable.

(ii) Waste from residential areas, hotels, offices and commercial areas must be segregated into different categories of biodegradable and non degradable wastes for treating, recycling and disposing appropriately.

(iii) Composting has proven to be of great help in managing waste as it has led to:

1. Conversion of organic waste into valuable fertilizers.

2. Reduction of the quantity of waste to be disposed of by householder.

3. It is normal waste disposal system and help nutrients get back into the soil.

(d) (i) Trees must be planted in and around the industrial areas as trees can arrest the pollutants and avoid health hazards of the human and animal population living in and around the industry.

(ii) Chemical fertilizers remain in the soil for a long time contaminating the top soil and ground water while the organic manure improves the texture of the soil, aids plant growth and increase the water holding capacity of the soil, . Thus, chemical fertilizers must be replaced by organic manure.

(iii) Disposal of plastics and its effects on human health are a matter of great concern. Coloured plastics are harmful as their pigment contains heavy metals that are highly toxic other toxic contents in plastics can cause great harm to both humans and animals.

ICSE Class 10 ; Yc[fUd\mQuestion Paper 2020

GEOGRAPHY

H.C.G. - Paper – 2

(Two hours)

Answers to this Paper must be written on the answer sheet provided separately.

*You will **not** be allowed to write during the first **15** minutes.*

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

*Attempt **seven** questions in all.*

***Part I** is compulsory. All questions from **Part I** are to be attempted.*

*A total of **five** questions are to be attempted from **Part II**.*

The intended marks for questions or parts of questions are given in brackets [].

*To be supplied with this Paper: Survey of India Map Sheet No. **45D/10***

and 20 cm of twine.

Note:

- (i) *In all **Map Work**, make wise use of arrows to avoid overcrowding of the map.*
- (ii) *The extract of **Survey of India Map Sheet No. 45D/10** must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the paper.*
- (iii) *The Map given at the end of this question paper must be detached, and after marking, must be fastened to your answer booklet.*
- (iv) ***All sub-sections of the questions attempted must be answered in the correct serial order.***
- (v) *All working including rough work should be done on the same answer sheet which is used to answer the rest of the paper.*

This Paper consists of 8 printed pages and 1 outline map.

T20 502

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Turn over

PART I (30 Marks)

Attempt *all* questions from this *Part*

Question 1

Study the extract of the **Survey of India** Map sheet No. **45D/10** and answer the following questions:

- (a) (i) Give a *six figure* grid reference for the spot height .324 in *northern* part of the map extract. [2]
(ii) Give a *four figure* grid reference for *open scrub south of Dhad Talao*.
- (b) (i) What is the *meaning* of the term '**Contour interval**'? [2]
(ii) What is the contour interval of the sheet provided to you?
- (c) What is the *area in kilometre square* of the region between *06 and 09 Eastings* and *22 and 27 Northings*? [2]
- (d) What is the *significance* of the following *colours* used on the survey map? [2]
(i) Yellow colour.
(ii) Green colour.
- (e) What is the *compass direction* of? [2]
(i) Idarla (0825) from Bhamra (0420).
(ii) Dhana (0623) from Amarapura (0124).
- (f) (i) Name the *settlement pattern* seen in the grid square 0819. [2]
(ii) Name the *drainage pattern* seen in the grid square 0827.
- (g) (i) Name **two** *man made features* seen in the grid square 0723. [2]
(ii) Name **two** *natural features* seen in the grid square 0218.
- (h) (i) What is the *black horizontal line* drawn between 18 and 19 Northings? [2]
(ii) Name the most important settlement of the region shown on the map extract.
- (i) Draw the conventional symbol for each of the following: [2]
(i) Lined perennial well.
(ii) Seasonal tank.
- (j) (i) Give **one** *evidence* to prove that the regions shown on the map extract receive scanty rainfall. [2]
(ii) What is .5r in the grid square 0321?

Question 2

On the outline map of India provided:

- (a) Mark and name *Nilgiris*. [1]
- (b) Mark and name *Kochi*. [1]
- (c) Mark and name the *Karakoram Pass*. [1]
- (d) Mark and name $82\frac{1}{2}^{\circ}E$ Longitude. [1]
- (e) Shade and name the *Coromandel Coastal Plain*. [1]
- (f) Mark and name the *River Brahmaputra*. [1]
- (g) Mark and name the *Gulf of Kutch*. [1]
- (h) Mark and name the *Satpura*. [1]
- (i) Mark using arrows, the direction of the *South West Monsoon wind* during summer over the *Arabian Sea* and label it. [1]
- (j) Shade and label a *sparsely populated* region in India. [1]

PART II (50 Marks)

Attempt **any five** questions from **this Part**

Question 3

- (a) (i) Name one state in the north western part of India that receives rainfall during winter. [2]
- (ii) What is the source of this rainfall?
- (b) Give a reason for each of the following: [2]
- (i) Rainy season in India is after the summer season.
- (ii) Tamil Nadu has more rainy months than Kerala, yet, Kerala receives more rainfall than Tamil Nadu.
- (c) (i) What do you understand by the term “*Burst of Monsoon*”? [3]
- Name the state that experiences the “Burst of Monsoon”.

(ii) Even though India gets abundant rainfall during the rainy season, yet, some places experience drought. Explain giving suitable examples.

(iii) Why is Shimla colder than Delhi during summer?

(d) Study the climatic data given below and answer the questions that follow: [3]

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temp. in °C	8.4	11.5	21.6	28.3	35.1	38.5	41.0	38.0	30.8	29.2	15.6	10.2
Rainfall in cms.	1.5	0.9	0.5	–	–	12.5	17.8	18.5	12.5	12.5	6.2	2.1

(i) Calculate the *annual range of temperature*.

(ii) State whether the station is located in the *coastal area* **or** in the *continental interior*.

(iii) *Name the wind that brings most of the rainfall to this area.*

Question 4

(a) (i) Name the parent rock that contributes to the formation of red soil. [2]

(ii) How does this soil get its '*red*' colour?

(b) Name the following: [2]

(i) a soil that occurs *insitu* and is good for cotton crop.

(ii) soil that is formed due to *high temperature and heavy rainfall*.

(c) With reference to *Alluvial Soil* answer the following: [3]

(i) What are the **two types** of Alluvial Soil?

(ii) Name an area where Alluvial soil is found.

(iii) Name **two crops** that grow well in this soil.

(d) (i) Define the term '*Residual*' soil. [3]

(ii) Name **two** crops that are grown on laterite soil.

(iii) Name **two** important **agents of soil erosion**.

Question 5

- (a) State *two ways* by which forests help in protecting the environment. [2]
- (b) With reference to *Tropical Deciduous forests* answer the following questions: [2]
- (i) Name *two states* where it is found.
 - (ii) Name *two important trees* found in this forest.
- (c) Briefly explain the following: [3]
- (i) Why are Tropical Evergreen forests called “*Evergreen*”?
 - (ii) Why is afforestation essential in the cities that have Iron and Steel industries?
 - (iii) How do forests act as a *source of income* for the people.
- (d) Give a *reason* for each of the following: [3]
- (i) The Tropical Deciduous forest is commercially the most important forest belt in India.
 - (ii) Tropical Evergreen forests occur on the windward side of Western Ghats.
 - (iii) It is very difficult to move through *tidal forests*.

Question 6

- (a) Mention any *two* methods of recharging ground water aquifers. [2]
- (b) (i) Name the *most common* means of irrigation used in India. [2]
- (ii) Give one reason for the popularity of this means of irrigation in our country.
- (c) (i) Name two states of India where *Canal irrigation* is extensively used. [3]
- (ii) Name the types of canals used in India.
- (iii) Mention one point of difference between the types of canals mentioned by you.
- (d) (i) What geographical conditions make irrigation necessary in the country? [3]
- (ii) How has irrigation changed the cropping pattern in India?
- (iii) Why is there a scarcity of surface water in our country?

Question 7

- (a) (i) Why is *iron ore* called the back bone of our modern industry? [2]
(ii) Mention *two* uses of iron ore.
- (b) Mention *one agricultural* and *one industrial* problem solved by the *Bhakra Nangal Dam*. [2]
- (c) (i) Name the state that is the leading producer of Manganese. [3]
(ii) Name the mineral oil field of India which is the largest producer of Petroleum.
(iii) Mention two advantages of using Geothermal energy over coal.
- (d) (i) Mention one disadvantage of using natural gas as a source of power. [3]
(ii) How is the residue from a Bio-gas plant put to use?
(iii) Why is the use of alternative sources of energy becoming essential in modern time?

Question 8

- (a) Mention two points of difference between *subsistence farming* and *commercial farming*. [2]
- (b) Explain briefly the following terms: [2]
(i) *Ginning*.
(ii) *Ratooning*.
- (c) With reference to the wheat crop answer the following questions: [3]
(i) Name the state which is the leading producer of this crop in India.
(ii) Mention the climatic condition found suitable for the cultivation of this crop.
- (d) Give a geographical reason for each of the following: [3]
(i) Cultivation of *rice* requires flat level land.
(ii) *Pulses* are important rotation crops.
(iii) *Bajra* and *Jowar* are grown as dry crops.

Question 9

- (a) Give *two* reasons as to why Mumbai has developed into an important *cotton textile centre*. [2]
- (b) (i) What are *Basic Industries*? [2]
(ii) Give one example of a *Basic Industry* in India.
- (c) (i) State *two problems* faced by the *Silk Industry* of India. [3]
(ii) Mention the most important *factor for location* of *Sugar industries*.
- (d) Briefly answer the following: [3]
(i) From where does the *Rourkela Steel plant* obtain its supply of *coal*?
(ii) From where does the *Tata Iron and Steel plant* obtain its supply of *iron ore*?
(iii) Name *two cities* that are important for the production of Electronics.

Question 10

- (a) With reference to **Waterways** answer the following questions: [2]
(i) Mention *two advantages* of *inland water transport*.
(ii) Why is *inland water transport* not well developed in India?
- (b) Even though all means of transport are well developed in India, yet, *road transport remains the most popular* means of transport. Justify this statement. [2]
- (c) Give a *reason* for each of the following: [3]
(i) *Roadways* is not well developed in *North East India*.
(ii) *Railways* are under the *public sector*.
(iii) A good network of transport is of great help for the development of the economy.
- (d) (i) Give two disadvantages of *Airways*. [3]
(ii) Why is there an increase of airway traffic in recent years?

Question 11

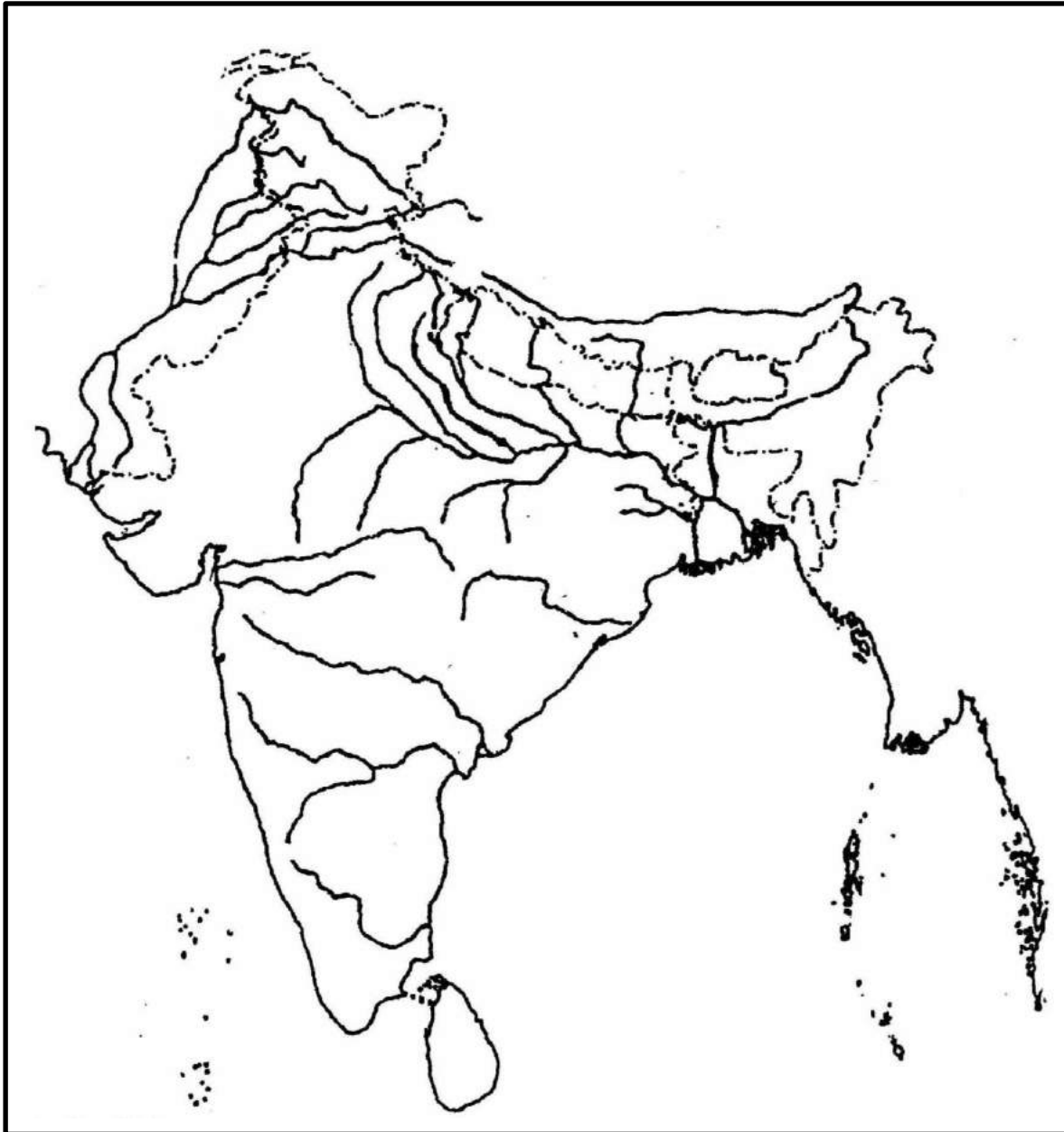
- (a) (i) What do you mean by *segregation of waste*? [2]
(ii) Why is segregation of waste essential before its disposal?
- (b) Why should sewage be treated before disposal? [2]
- (c) Briefly answer each of the following: [3]
(i) What is the effect of Waste accumulation on terrestrial life?
(ii) What are the consequences of Water pollution?
(iii) What is the benefit of Composting?
- (d) (i) How can recycling of Waste help in reducing waste? [3]
Explain with suitable examples.
(ii) Mention one initiative taken by the Government to manage waste.
(iii) How can you as an individual contribute towards waste management?

Question No. 2

Index No...... **UID**.....

(This map, if used, must be fastened with all other answers)

Map of India for Question 2.



ONLY FOR THE EXAMINER										
a	b	c	d	e	f	g	h	i	j	Total

**ICSE Board
Class X Geography
Semester 1 Examination
H.C.G. Paper 2
Board Paper – 2021**

Time: 90 Minutes

Total Marks: 40

Maximum Marks: 40

Time allowed One and a half hours

You will not be allowed to write during the first 10 minutes

This time is to be spent in reading the question paper.

ALL QUESTIONS ARE COMPULSORY.

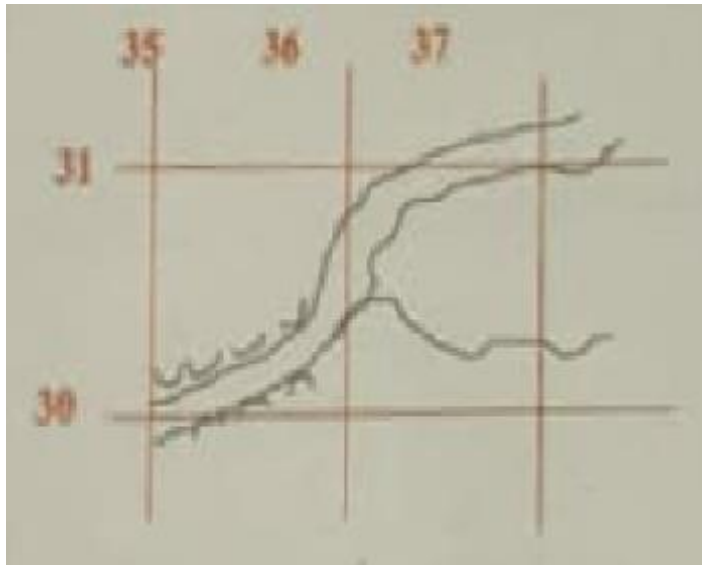
The intended marks for questions or parts of questions are given in brackets []

Select the correct option for each of the following questions.

Question 1

Refer to the image and answer the questions that follows:

[1]



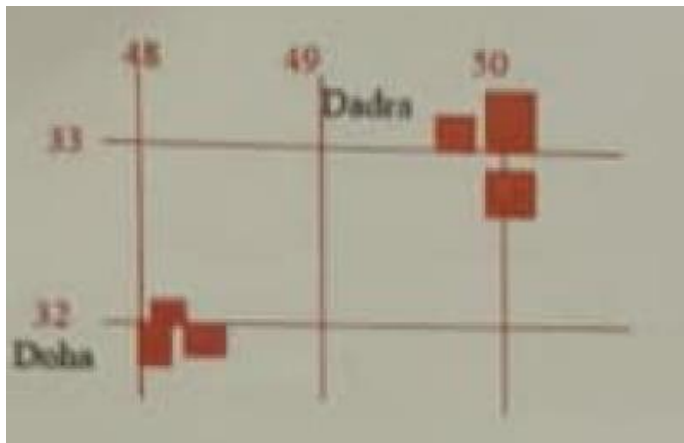
What do the black curved line in 3530 indicate?

- (a) Open Scrub
- (b) Dry land.
- (c) Broken ground
- (d) Seasonal Stream

Question 2

Refer to the image and answer the questions that follows:

[1]



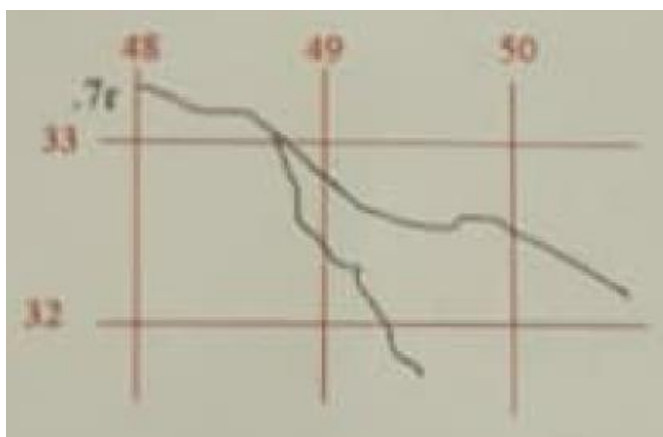
What is the direction of Dadra from Doha?

- (a) North east
- (b) North west
- (c) South east
- (d) South west

Question 3

Refer to the image and answer the questions that follows:

[1]



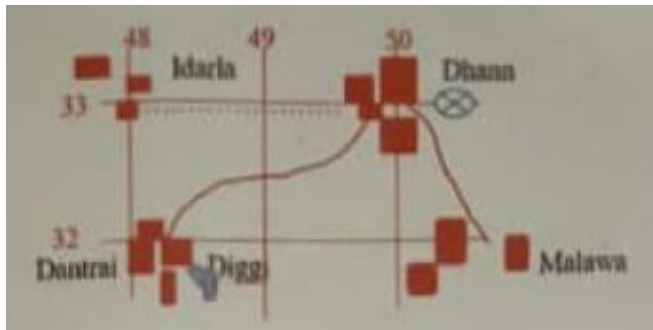
What is .7r in 4833?

- (a) Relative bright of 7 m.
- (b) Relative Height of 7 cm.
- (c) Relative depth of 7 cm.
- (d) Relative depth of 7 m.

Question 4

Refer to the image and answer the questions that follows:

[1]



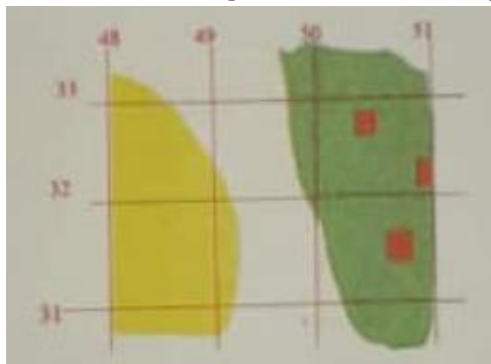
What mode of transport is used by the people of Malawa and Dantrai?

- (a) Foot Path
- (b) Cart track
- (c) Pack Track
- (d) Railway

Question 5

Refer to the image and answer the questions that follows:

[1]



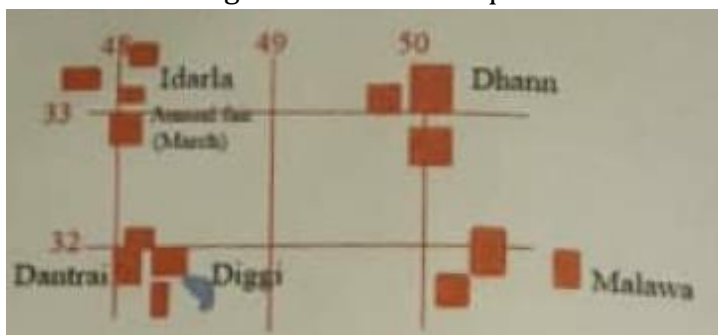
What is the main occupation of the people living in the area shown on the eastern part?

- (a) Mining
- (b) Agriculture
- (c) Forestry
- (d) Sheep rearing

Question 6

Refer to the image and answer the questions that follows:

[1]



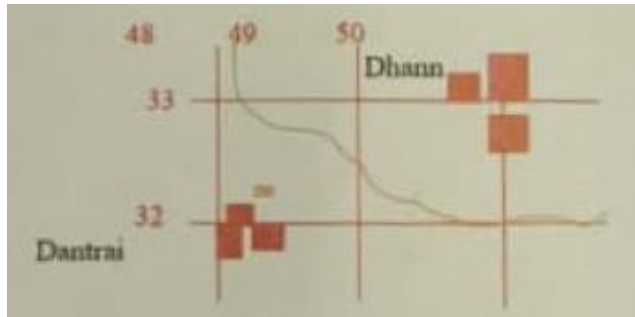
What is the social significance of Idarla?

- (a) Idarla is larger than other settlements.
- (b) Idarla is closer to Dantrai.
- (c) Annual fair at Idarla.
- (d) Idarla is the largest settlement.

Question 7

Refer to the image and answer the questions that follows:

[1]



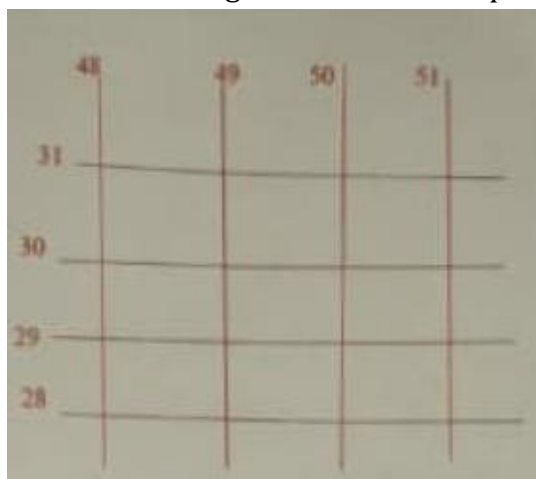
What does the number 200 in grid square 4932 represent?

- (a) A line of latitude.
- (b) A line of longitude.
- (c) Contour height.
- (d) Spot height.

Question 8

Refer to the image and answer the questions that follows:

[1]



With reference to the scale given on topographical map (2cm = 1 km), what is the area of the land enclosed between 48 to 50 easting and 28 to 31 northings?

- (a) 06 sq. m.
- (b) 06 sq. km.
- (c) 60 sq. km.
- (d) 60 sq. m.

Question 9

What does nearness of contour lines indicate?

[1]

- (a) It indicates steep slope.
- (b) It indicates gentle slope.
- (c) It indicates desert area.
- (d) It indicates irregular area.

Question 10

Which scale out of the following that is printed in the topographical map, is considered a special scale?

[1]

- (a) Statement Scale.
- (b) Representative fraction.
- (c) Linear Scale.
- (d) Graphical Scale.

Question 11

With Reference to winter rain in India answer the following:

i. Western disturbances provide rain to which of the following States?

[1]

- (a) Punjab
- (b) Sikkim
- (c) West Bengal
- (d) Maharashtra

ii. Which of the following cause rain to Coromandel Coast?

[1]

- (a) Retreating Monsoon
- (b) Kal Baisakhi
- (c) Western disturbances
- (d) South west Monsoons.

Question 12

Westerly depressions are active in India during which of the following months?

[1]

- (a) Between September and November
- (b) Between December and January
- (c) Between June and September
- (d) Between March and May

Question 13

Study the following data and answer the questions that follows:

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
TEMP (°C)	23.1	24.2	26.5	29.3	32	32.8	33.1	32.1	30.5	29.3	28.7	26.1
RAIN (cm)	15.3	10.1	0.3	0.1	1.3	4.5	6.1	10.2	10.5	20.1	16.8	19.0

- i. What is the annual range of temperature experienced by the station? [1]
- (a) 20° C
 - (b) 10° C
 - (c) 16° C
 - (d) 21° C

- ii. Which according to the given data is the driest month? [1]
- (a) March
 - (b) April
 - (c) May
 - (d) June

Question 14

- Why is the central part of Deccan plateau a dry area? [1]
- (a) It is away from the sea.
 - (b) There is no barrier in the path of rain bearing wind
 - (c) It is due to Jet Streams
 - (d) It is a rain shadow area of Western Ghats.

Question 15

- Why does Patna get more rain than Agra during the summer monsoon season? [1]
- (a) Patna lies on windward side
 - (b) Patna is on western side so Arabian Sea branch brings more rain to it than to Agra
 - (c) Patna is on eastern side, So Bay of Bengal branch brings more rain to it than to Agra
 - (d) Patna gets rain throughout the year

Question 16

- Which of the statement is not correct for Indian monsoon? [1]
- (a) It is erratic in nature.
 - (b) It is seasonal in nature.
 - (c) Most of the rain is in winter time
 - (d) Most of the rain is orographic or relief type.

Question 17

- With reference to methods of prevention of soil erosion answer the following: [1]
- i. Name the method used to prevent soil erosion by running water.
- (a) Terrace farming
 - (b) Strip cropping
 - (c) Shelter belts
 - (d) Leaving the land fallow

- ii. Name the method used to prevent soil erosion by wind. [1]
- (a) Contour ploughing
 - (b) Strip cropping
 - (c) Plugging of gullies
 - (d) Use of fertilizer

Question 18

- i. Name the soil that is found in central Deccan plateau? [1]
- (a) Black Soil
 - (b) Alluvial Soil
 - (c) Red Soil
 - (d) Laterite Soil
- ii. How is the soil named by you in (i) above formed? [1]
- (a) Formed by the deposition of silt brought down by river.
 - (b) Formed by the weathering of lateritic rocks.
 - (c) Formed by the Weathering of basic lava rocks.
 - (d) Formed by the weathering of metamorphic rocks.

Question 19

- Why is Laterite soil used in Goa and Kerala for the construction of houses? [1]
- (a) It became hard when dry.
 - (b) This soil is generally coarse in texture and process in nature.
 - (c) It has more of clay content in it.
 - (d) It looks beautiful when used in buildings.

Question 20

- Why are the foothills of Himalayas prone to excessive soil erosion? [1]
- (a) Absence of crop cover.
 - (b) Too much of development of transportation.
 - (c) Large scale deforestation in past.
 - (d) Tourists are spreading pollutants in river.

Question 21

Name the soil that possesses the following characteristics:

- (i) Soil is generally confined to river basins. [1]
- (a) Black Soil
 - (b) Alluvial Soil
 - (c) Red Soil
 - (d) Laterite Soil

- i. Soil that becomes infertile because of desilication. [1]
- (a) Black Soil
 - (b) Alluvial Soil
 - (c) Red Soil
 - (d) Laterite Soil

Question 22

The productive functions of forest include: [1]

- (a) Habitual for the wildlife.
- (b) Control the water flow.
- (c) Provide various products such as timber. Fuel wood, leaves, etc.
- (d) Producing oxygen.

Question 23

Which of the following pairs is correctly matched? [1]

- (a) Babool – Tropical evergreen forest
- (b) Sandalwood – Tropical deciduous forest
- (c) Cinchona – Mountain Forest
- (d) Sal – Tidal forest

Question 24

Name the type of Natural Vegetation that is found in the windward side of the Western Ghats: [1]

- (a) Tropical Evergreen
- (b) Tropical Deciduous
- (c) Mangrove Forest
- (d) Mountain Forest

Question 25

Which of the following is NOT a characteristic of desert vegetation? [1]

- (a) Short stunted growth of vegetation
- (b) Thick fleshy stem
- (c) Broad leaves
- (d) Long and deep roots

Question 26

Why do we need forest conservation? [1]

- (a) Forests provide food for growing population.
- (b) Forests help in earning foreign exchange.
- (c) Forests help in maintaining ecological balance.
- (d) Forests look beautiful.

Question 27

During which month do we celebrate VAN MAHOTSAV every year in India? [1]

- (a) In December to February time period.
- (b) In July to September time period.
- (c) In March to May time Period.
- (d) In November to January time period.

Question 28

What is the term used to describe the growing of trees in various part of the country? [1]

- (a) Re afforestation.
- (b) Deforestation.
- (c) Agronomy.
- (d) Afforestation.

Question 29

Why is there a need no conserve water in India? [1]

- (a) A lot of water is polluted
- (b) No water is found below the land in India
- (c) Water is in abundance in India
- (d) We receive lot of rain in summer

Question 30

What are the advantages of rain water harvesting? [1]

- (a) Recharge of ground water and conservation of water
- (b) Provide water through canals to the farms and its conservation
- (c) It helps in harvesting of crops and its storage
- (d) Provide water for multinational companies to produce packaged drinking water.

Question 31

Why is canal irrigation more popular in Northern Plains? [1]

- (a) The surface of land is almost flat and soft soil is easy to dig.
- (b) To supply water to a number of cities in the plain area.
- (c) Rocky surface of the plain in their construction.
- (d) Rivers are seasonal and so canals are needed.

Question 32

Which of the following is correctly matched? [1]

- (a) Tube well – Karnataka
- (b) Tank – Punjab
- (c) Lined well – Uttar Pradesh
- (d) Canal – Mizoram

Question 33

Which of the following is NOT a suitable condition for the development of tank irrigation?

- (a) Presence of natural depressions.
- (b) Permeable rock structure.
- (c) Plenty of rain in rainy period.
- (d) Hard subsurface rock structure.

Question 34

Which among the following is a ground water source?

[1]

- (a) Spring
- (b) Pond
- (c) River
- (d) Lake

Question 35

What is the importance of “DRIP IRRIGATION”?

[1]

- (a) It is an ultra-modern system of irrigation.
- (b) It is cheaper than other sources.
- (c) It can irrigate more area with less usage of water.
- (d) It is used by almost all farmers in India.

Solutions

Answer 1

(c) Broken ground

Answer 2

(a) North east

Answer 3

(a) Relative height of 7 meters

Answer 4

(b) Cart track

Answer 5

(c) Forestry

Answer 6

(c) Annual fair at Idarta

Answer 7

(c) Contour Height

Answer 8

(b) 06 Sq Km

Answer 9

(a) It indicates steep slope

Answer 10

(b) Representative Fraction

Answer 11

(i) (a) Punjab

(ii) (a) Retreating Monsoon

Answer 12

(b) Between December and January

Answer 13

- (i) (b) 10⁰C
- (ii) (b) April

Answer 14

- (d) It is a rain shadow area of the Western Ghats.

Answer 15

- (c) Patna is on the eastern side, so the Bay of Bengal branch brings more rain to it than to Agra.

Answer 16

- (c) Most of the rain is in winter time.

Answer 17

- (i) (a) Terrace farming
- (ii) (b) Strip cropping

Answer 18

- (i) (a) Black soil
- (ii) (c) Formed by the weathering of basic lava rocks.

Answer 19

- (a) It becomes hard when dry.

Answer 20

- (c) Large scale deforestation in the past.

Answer 21

- (i) (b) Alluvial soil
- (ii) (d) Laterite soil

Answer 22

- (c) Provides various products such as timber, fuel wood, leaves etc.

Answer 23

- (b) Sandalwood- Tropical deciduous forest

Answer 24

- (a) Tropical Evergreen

Answer 25

- (c) Broad leaves

Answer 26

- (c) Forests help in maintaining ecological balance.

Answer 27

- (b) In July to September time period.

Answer 28

(d) Afforestation

Answer 29

(a) A lot of water is polluted.

Answer 30

(a) Recharge of groundwater and conservation of water.

Answer 31

(a) The surface of land is almost flat and soft soil is easy to dig.

Answer 32

(c) Lined well- Uttar Pradesh

Answer 33

(b) Permeable rock structure.

Answer 34

(a) Spring

Answer 35

(c) It can irrigate more area with less usage of water.

Semester-2

GEOGRAPHY 2022

Maximum Marks: 40

Time allowed: One and a half hours

Answers to this Paper must be written on the paper provided separately.

You will not be allowed to write during the first 10 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

Attempt all questions from Section A and any three questions from Section B.

The marks intended for questions are given in brackets []

Section-A

(Attempt all questions)

Question 1.

On the outline map of India provided mark and name the following :

[10]

- (i) Vindhya mountain
- (ii) River Yamuna
- (iii) Kolkata
- (iv) Kanchenjunga
- (v) Lake Chilka
- (vi) Konkan coastal plain
- (vii) Thar desert
- (viii) Gulf of Khambhat
- (ix) Mark with arrows the direction of N.E. Monsoon wind
- (x) Mumbai High

Section-B

(Attempt any three questions from this Section.)

Question 2.

- (i) (a) Give any one use of Copper.
(b) Names two Indian states in which iron ore is found in abundance. [2]
- (ii) With reference to Hirakud project answer the following: [2]
 - (a) On which river is it based?
 - (b) Name an Indian State benefitted by Hirakud project.
- (iii) Give three disadvantages of using coal. [3]
- (iv) (a) Mention two advantages of nuclear power.
(b) What is the advantage of using solar energy in place of the conventional sources of energy? [3]

Question 3.

- (i) Mention two problems faced by the agriculture sector of India. [2]
- (ii) (a) Mention any one climatic condition found suitable for growing cotton. [2]
(b) Name the state that is the leading producer of cotton in India.
- (iii) With reference to Rice cultivation answer the following: [3]
(a) Name the soil found suitable for its growth.
(b) Name the State that is the largest producer of this crop in India.
(c) In which cropping season is it generally grown in India?
- (iv) (a) Name the State that is the largest producer of sugarcane in India.
(b) Why more than two ratoon crops are not advisable for sugarcane farmers?
(c) What is Zayad cropping season? [3]

Question 4.

- (i) Differentiate between mineral based and agro based industry giving suitable example for each from India. [2]
- (ii) Give two ways in which petro chemical industry is important for India. [2]
- (iii) 3 With reference to Tata Steel plant answer the following: [3]
(a) Where is it located?
(b) From where does it get its coal requirements?
(c) From where does it get its iron ore requirements?
- (iv) (a) Name any two by products of the sugar industry.
(b) Why are the cotton textile industries mostly located in the coastal areas? [3]

Question 5.

- (i) Mention two advantages of using roadways. [2]
- (ii) What is the purpose of developing the Golden Quadrilateral in India? [2]
- (iii) Mention three disadvantages of waterways. [3]
- (iv) Give a reason for the following : [3]
(a) Railways are not well developed in the North Eastern States of India.
(b) Air transport has gained popularity in recent time in India.
(c) NSEW is helpful for India.

Question 6.

- (i) Why is there a need for waste management in large metropolitan cities? [2]
- (ii) Why is composting considered a safe method of waste disposal? [2]
- (iii) (a) Why should we reuse waste?
(b) How can farm waste be made useful?
(c) How is dumping of waste harmful? [3]
- (iv) Mention three ways to reduce waste generation at home. [3]

GEOGRAPHY
(H.C.G. PAPER – 2)

Maximum Marks: 80

Time allowed: Two hours

Answers to this paper must be written on the answer sheet provided separately.

*You will **not** be allowed to write during the first 15 minutes.*

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

***Part I** is compulsory. All questions from **Part I** are to be attempted.*

*A total of five questions are to be attempted from **Part II**.*

The intended marks for questions or parts of questions are given in brackets [].

To be supplied with this paper: Survey of India Map Sheet No. G43S7.

Note:

- (i) *In all **map work**, make wise use of arrows to avoid overcrowding of the map.*
- (ii) *The extract of **Survey of India Map Sheet No. G43S7** must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the paper.*
- (iii) *The map given at the end of this question paper must be detached, and after marking, must be fastened to your answer booklet.*
- (iv) *All sub-sections of the questions attempted must be answered in the correct serial order.*
- (v) *All working including rough work should be done on the same answer sheet which is used to answer the rest of the paper.*

PART I (30 Marks)

(Attempt all questions from this Part.)

Question 1

Study the extract of the **Survey of India** Map Sheet No. **G43S7** and answer the following questions:

- (i) (a) Give the **four-figure** grid reference for $\Delta 224$. [2]
(b) What is the **contour interval** used in the given map extract?
- (ii) (a) Mention two man made features seen in **grid square 2706**. [2]
(b) Mention two natural features seen in **grid square 2905**.
- (iii) (a) What do you understand by **1:50,000** printed below the map extract? [2]
(b) What is the *pattern of drainage* seen in the **grid square 2505**?
- (iv) (a) What do you understand by **.10r** in **2709**? [2]
(b) What is the *compass direction* of **Mahudi Nani (2604)** from **Panswala (2909)**?
- (v) Calculate the **area** in *kilometre square* of the region enclosed between *Easting* [2]
26 to 29 and *Northing 05 to 11*.

Question 2

On the outline map of India provided:

- (i) Mark and label the *Satpura*. [1]
- (ii) Shade and label the *Gulf of Kutch*. [1]
- (iii) Mark and label the *River Chambal*. [1]
- (iv) Mark and label *Delhi*. [1]
- (v) Mark and label $80^{\circ}30'$ *E longitude*. [1]
- (vi) Mark and label *Jharia coalfield*. [1]

- (vii) Mark with arrows and name the *Southwest Monsoon winds*. [1]
- (viii) Mark and label the *Karakoram Pass*. [1]
- (ix) Shade and label a *sparsely populated* region in *Western India*. [1]
- (x) Shade an area having *Alluvial soil*. [1]

Question 3

Choose the correct answers to the questions from the given options. [10]

(Do not copy the questions, write the correct answers only.)

- (i) Which of the following area *receives rain* from the *North East Monsoon*?
- (a) Konkan coast
 - (b) Ganga basin
 - (c) Coromandel coast
 - (d) Malabar coast
- (ii) Which is the **most widespread soil** of India?
- (a) Red soil
 - (b) Alluvial soil
 - (c) Laterite soil
 - (d) Black soil
- (iii) Which type of forest is found **mostly** in the *coastal areas of India*?
- (a) Tropical Evergreen Forest
 - (b) Tropical Desert Forest
 - (c) Littoral Forest
 - (d) Tropical Deciduous Forest

- (iv) Which of the following is a **ground water source**?
- (a) Pond
 - (b) Lake
 - (c) Spring
 - (d) River
- (v) **Copper** is alloyed with **Zinc** to form:
- (a) Stainless steel
 - (b) Brass
 - (c) Bronze
 - (d) Aluminium
- (vi) **Hirakud dam** is based on which of the following *rivers*?
- (a) River Godavari
 - (b) River Mahanadi
 - (c) River Krishna
 - (d) River Narmada
- (vii) Which of the following is **NOT** a problem of Indian agriculture?
- (a) Dependence on monsoon
 - (b) Small land holdings
 - (c) Two main cropping seasons
 - (d) Use of traditional methods of farming
- (viii) Which of the following is a basic / key industry?
- (a) Iron and Steel Industry
 - (b) Silk Industry
 - (c) Electronic Industry
 - (d) Cotton textile Industry

- (ix) Which of the following is a staple food grain of Indians?
- (a) Wheat
 - (b) Rice
 - (c) Gram
 - (d) Arhar
- (x) Which of the following method of waste disposal is *harmful*?
- (a) Composting
 - (b) Segregation
 - (c) Dumping
 - (d) Vermicomposting

PART II (50 Marks)

(Attempt any five questions from this Part.)

Question 4

- (i) Name the *seasons* of India and mention the *duration* of each season. [2]
- (ii) Why maximum rainfall in India occurs after the summer season? [2]
- (iii) Give a geographical reason for each of the following: [3]
 - (a) The *Malabar coast* receives heavy rainfall in the month of *July* but the *Coromandel coast* during this time remains comparatively dry.
 - (b) *Punjab* receives rainfall in winter season.
 - (c) *Mumbai* is warmer than *Delhi* in the month of December.

- (iv) Study the climate data of Station X and answer the questions that follow: [3]

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temp in °C	21.0	21.9	24.3	27.2	28.0	26.4	26.1	25.4	26.0	26.0	23.8	21.2
Rainfall in cm	5.1	2.8	1.2	1.7	3.9	4.6	8.4	11.4	11.9	31.6	34.5	14.8

- (a) Calculate the annual range of temperature of Station X.
(b) Name the wind that brings most of the rainfall to this station.
(c) On which coast of India is Station X located?

Question 5

- (i) (a) Mention *any two* causes of soil erosion in India. [2]
(b) Name *two* soil conservation methods that may be practised in arid (dry) regions.
- (ii) Mention *two* characteristics of *Black soil*. [2]
- (iii) Name the soil: [3]
(a) That is found on the summits of Eastern and Western Ghats.
(b) That is suitable for dry farming.
(c) That varies in texture.
- (iv) Give a geographical reason for each of the following: [3]
(a) *Terrace farming* is an ideal soil conservation method for hilly areas.
(b) *Khadar* soils are preferred over *Bhangar* soils.
(c) Foothills of Himalayas have been affected by soil erosion.

Question 6

- (i) State *two* ways in which forests help in protecting the environment. [2]
- (ii) Mention *two* ways in which Tropical Desert vegetation has adapted to its environment. [2]

- (iii) (a) In which natural vegetation belt is *Sundari* tree found? [3]
(b) Why is the *Tropical Deciduous Forest* commercially the most exploited forest belt of India? (*Two points*)
- (iv) (a) Name one region in India where Tropical Evergreen Forest is found. [3]
(b) Mention the *temperature* and *rainfall* conditions found suitable for its growth.

Question 7

- (i) Give a reason for each of the following: [2]
(a) Agriculture sector in India needs the support of irrigation.
(b) *Well irrigation* is a popular means of irrigation in *Northern India*.
- (ii) Distinguish between *Inundation canal* and *Perennial canal*. [2]
- (iii) (a) Where in India is *Tank irrigation* most widely used? [3]
(b) Give *one* factor that has led to its popularity in the region mentioned by you.
(c) Mention *one* advantage of using tank as a means of irrigation.
- (iv) (a) What is *Rainwater Harvesting*? [3]
(b) Give *two* ways in which *Rainwater Harvesting* is important for India.

Question 8

- (i) (a) Name the state of India that leads in the production of *Manganese*. [2]
(b) What is the importance of *Manganese* for the *Iron and Steel industry*?
- (ii) Why is *conventional source of energy* **not** considered an *ecofriendly* source of energy? [2]

- (iii) (a) How is *Bhakra Nangal dam* beneficial for Punjab? [3]
(b) Name *two* states where coal is mined in abundance.
(c) Mention *one* advantage of using wind energy.
- (iv) Name the following: [3]
(a) A mineral used to generate nuclear energy.
(b) The non-conventional energy source that has the *most widespread* potential usage in India.
(c) An offshore oil field of India.

Question 9

- (i) Differentiate between *Intensive farming* and *Extensive farming*. [2]
- (ii) Mention *two* problems faced by the Indian farmers. [2]
- (iii) (a) Give *one* advantage of *transplantation method* of sowing rice. [3]
(b) What is '*Ginning*'?
(c) Name *any two* pulses grown in India.
- (iv) (a) What is meant by '*Retting*'? [3]
(b) What kind of soil is required for the cultivation of tea?
(c) Why is pruning necessary for tea plant?

Question 10

- (i) How are the industries important for India? (*Two points*) [2]
- (ii) State the difference between *Agro based industry* and *Forest based industry*. [2]
Give *one* example for each type of industry.

- (iii) (a) What has made *Mumbai* an important centre for *cotton textile* production? [3]
(Write any two points)
- (b) Why are the *petrochemical* products in great demand?
- (iv) (a) Mention *two* problems faced by the *Sugar industry* of India. [3]
- (b) Where is TATA STEEL located?
- (c) Why is the *Silk industry* losing the market in recent times?

Question 11

- (i) Why is it important to have a well developed means of transport in India? [2]
- (ii) "Though an expensive mode of transport, *Airways* is gaining popularity in India." Explain giving two reasons. [2]
- (iii) (a) Why are *South Indian rivers* not ideal for inland water transport? [3]
- (b) Mention *two* advantages of **waterways**.
- (iv) (a) Why are **roadways** considered more important than any other means of transport? <https://www.icseonline.com> [3]
- (b) Mention two advantages of using *railways* as means of transport.

Question 12

- (i) Why should *Waste Management* be practiced in every *school*? [2]
- (ii) Mention *one* advantage and *one* disadvantage of **dumping** of waste. [2]
- (iii) Briefly answer the following: [3]
- (a) How is *segregation* of the waste helpful?
- (b) Mention *one* way in which we can *reuse* waste.
- (c) Mention *one* benefit of *Composting*.
- (iv) (a) How is *recycling* of waste helpful? Give an example of recycling of waste. [3]
- (b) Mention *any one* initiative taken by the *Government* to manage waste.

Geography

CISCE

Academic Year: 2023-2024

(English Medium)

Date & Time: 28th February 2024, 11:00 am

Duration: 2h

Marks: 100

1. Answers to this Paper must be written on the answer sheet provided separately.
 2. You will not be allowed to write during the first 15 minutes.
 3. This time is to be spent reading the question paper.
 4. The time given at the head of this Paper is the time allowed for writing the answers.
 5. Part I is compulsory. All questions from Part I are to be attempted.
 6. A total of five questions are to be attempted from part II.
 7. The intended marks for questions or parts of questions are given in brackets []
 8. To be supplied with this paper: Survey of India Map Sheet No. G4357.
-
- A. In all map work, make wise use of arrows to avoid overcrowding of the map.
 - B. The extract of Survey of India Map Sheet No. G4357 must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the paper.
 - C. The map given at the end of this question paper must be detached, and after marking, must be fastened to your answer booklet.
 - D. All subsections of the questions attempted must be answered in the correct serial order.
 - E. All work, including rough work, should be done on the same answer sheet, which is used to answer the rest of the paper.

PART-I (30 Marks) (Attempt all questions from this Part)

Q1. Study the extract of the Survey of India Map sheet No. G43S7 and answer the following questions:



i.

- Give the six-figure grid reference for spot height .522.
- What is the pattern of settlement in the grid square 3591?

ii.

- Mention two man-made features seen in the grid square 3794.
- Mention two means of transport used by the people of Nani Bhatamal in the grid square 3691.

iii.

- Identify the landform marked by the contours in the grid square 3896.
- What is the pattern of drainage seen in the grid square 3697?

- iv.
 - a. What is the reason for the presence of causeway in the grid square 3695?
 - b. What is the compass direction of Khara (4097) from Karja (3994)?
- v. Calculate the area in kilometre square of the region to the south of 94 Northing.

Solution

- i.
 - a. 376966
 - b. Temporary hut
- ii.
 - a. 1. Chhatri
 - 2. Permanent huts
 - 3. Perennial lined well
 - b. 1. Cart track
 - 2. Metalled road
- iii.
 - a. A ridge
 - b. Dendritic pattern
- iv.
 - a. Due to seasonal or scanty rainfall.
 - b. North-east
- v. The area of the region to the south of 94 Northing is calculated as follows:
∴ Scale given: 2 cm (in a grid square) = 1 km
There are 6 grid squares to the south of 94 Northing, and the length of the toposheet provided is 10 grid squares.

∴ Area = Length × Width

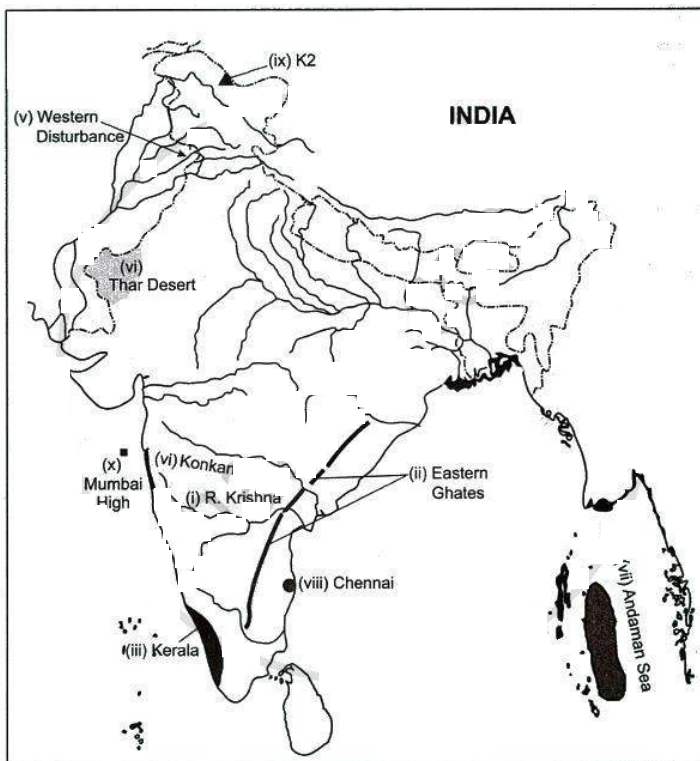
= 10 grid squares × 6 grid squares

= 60 km²

Q2. On the outline map of India provided:

- i. Mark and label the river Krishna.
- ii. Mark and label the Eastern Ghats.
- iii. Shade and label a densely populated area in the southern part of India.
- iv. Shade and label the Konkan coastal plain.
- v. Mark with an arrow and label the direction of western disturbance.
- vi. Shade and label the Thar Desert.
- vii. Shade and label the Andaman Sea.
- viii. Mark and label the city Chennai.
- ix. Mark and name the highest peak of Himalayas in India.
- x. Mark and label Mumbai High.

Solution



Q3. Choose the correct answers to the questions from the given options. (Do not copy the questions, write the correct answers only.)

3.1. What causes snowfall in Kashmir during winter?

1. Tropical cyclone
2. Northeast Monsoon wind
3. Southwest Monsoon wind

4. Temperate cyclone

Solution

Temperate cyclone

3.2. Which of the following helps in soil conservation?

1. Afforestation
2. Overgrazing
3. Mining
4. Shifting agriculture

Solution

Afforestation

3.3. Which means of irrigation can be developed with minimum expenditure?

1. Tube well
2. Canal
3. Well
4. Drip irrigation

Solution

Well

3.4. Read the table and identify the pair that is correctly matched:

	Natural Vegetation Belt	Tree
P	Tropical evergreen	Babool
Q	Tropical deciduous	Teak
R	Littoral	Ebony
S	Mountain forest	Banyan

1. P

2. Q

3. R

4. S

Solution

Q

3.5. Bauxite is the ore of _____.

1. Aluminium

2. Copper

3. Manganese

4. Iron

Solution

Bauxite is the ore of Aluminium.

3.6. Identify the source of energy that leads to pollution:

1. Tidal energy

2. Wind energy

3. Natural gas

4. Geo-thermal energy

Solution

Natural gas

3.7. Which of the following is NOT a centre for the iron and steel industry?

1. Bhilai
2. Bengaluru
3. Rourkela
4. Vishakhapatnam

Solution

Bengaluru

3.8. Which of the following farming method is used to grow tea on a large scale?

1. Subsistence farming
2. Plantation farming
3. Mixed farming
4. Shifting agriculture

Solution

Plantation farming

3.9. Which of the following means of transport has best use during floods/earthquake?

1. Airways
2. Railways
3. Roadways
4. Waterways

Solution

Airways

3.10. Which of the following is a biodegradable waste?

1. Broken glass
2. Wastepaper

3. Polythene
4. Plastic bags

Solution

Wastepaper

PART-II (50 Marks) (Attempt any five questions from this Part)

Q4.

4.1. 'Himalayas act as a climatic divide.' Justify the statement giving two reasons.

Solution

1. The Himalayas block the bitter cold winds of Central Asia from entering the subcontinent, which keeps South Asia much warmer than corresponding temperate regions in other parts of the world.
2. They stop the South Asian monsoon winds from reaching Central Asia, which would otherwise result in aridity and ample rainfall in the Indian subcontinent circumstances to the north.

4.2. Differentiate between Southwest Monsoon and Retreating Monsoon. (Any two differences)

Solution

	Southwest Monsoon	Retreating Monsoon
1.	From June through September, the Indian Ocean is the source of the Southwest Monsoon, which brings with it a lot of rain.	A change to drier weather is indicated by the Retreating Monsoon, which happens when the Southwest Monsoon winds turn around from October to November.
2.	It is mostly responsible for India's yearly rainfall, which results in extensive and intense rainfall, particularly in the country's western and southern regions.	It is characterized by clear skies, higher temperatures, and less rainfall in most of the nation.

4.3. (a) Give a geographical reason for the following:

Kolkata gets more rain than Delhi during rainy season.

Solution

Kolkata is closer to the Bay of Bengal than Delhi. During the rainy season, it receives more rainfall and is exposed to the monsoon winds.

4.3. (b) Give a geographical reason for the following:

Though both are hill stations, Shimla experiences snowfall during the winters but Ooty does not.

Solution

Shimla receives snowfall because of its greater altitude and cooler climate, whereas Ooty, located in a warmer subtropical environment, does not.

4.3. (c) Give a geographical reason for the following:

Winter monsoons bring less rain.

Solution

Due to their northeastern origin and the dry, cold air they carry from the continent's interior, the winter monsoons produce less rain and are not too moist.

4.4. Study the climate data of Station X and answer the questions that follow:

Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Temp. °C	8.4	11.5	21.6	28.3	35.1	38.5	41.0	38.0	30.8	29.2	15.6	10.2
Rainfall in cms	1.5	0.9	0.5	-	-	12.5	17.8	18.5	12.5	12.5	6.2	2.1

- Calculate the annual range of temperature of Station X.
- Name the rainiest month of the Station X.
- Is the Station X located in coastal area or in the continental interior?

Solution

- Annual range of the temperature = Maximum temperature - Minimum temperature

$$= 41.0 - 8.4$$

$$= 32.6^{\circ} \text{C}$$

- b. August has the highest rainfall, averaging 18.5 cm.
- c. Given the wide range of annual temperatures, which points to a continental climate, Station X most likely situated inland on the continent as opposed to at the seashore.

Q5.

5.1. Why is Black soil found suitable for the production of cotton? (Any two points)

Solution

Black soil is suitable for the production of cotton due to the following reasons:

- 1. Regur soil, another name for black soil, has a superior capacity to hold water. Its ability to retain moisture is advantageous for cotton plants, particularly in arid times.
- 2. Black soil has a high organic matter concentration and is rich in minerals, including calcium, magnesium, and potassium. These cotton plants require nutrients for healthy growth that will promote their general well-being and yield.

5.2. (a) Give one difference between the following:

Alluvial soil of Uttarakhand and alluvial soil of West Bengal.

Solution

Alluvial soil of Uttarakhand	Alluvial soil of West Bengal
Uttarakhand's alluvial soil is younger and less productive since it is located nearer the mountains, where rivers deposit coarser minerals.	Because rivers carry the alluvial soil farther and more slowly, it has aged, broken down more thoroughly, become finer, and is hence more fruitful in West Bengal.

5.2. (b) Give one difference between the following:

Transported soil and residual soil.

Solution

Transported soil	Residual soil
Transported soil is soil that has moved from its original location due to wind, water, ice, or gravity, and its makeup may differ from the bedrock beneath it.	On the other hand, residual soil forms in place by weathering while remaining above its parent rock and hence, in terms of mineral makeup, it is quite similar to the original rock.

5.3. (a) With reference to Laterite soil, answer the question that follows:

How is Laterite Soil formed?

Solution

Laterite soil is typically produced in tropical and subtropical regions as a result of the degradation of underlying bedrock. Over the course of millions of years, the weathering process involves the breakdown of various kinds of minerals, such as basalt, granite, and shale, in the presence of hot and humid conditions.

5.3. (b) With reference to Laterite soil, answer the question that follow:

How can Laterite soil be made productive?

Solution

Laterite soil can be made productive by adding organic matter such as compost or manure, which improves its fertility and structure.

5.3. (c) With reference to Laterite soil, answer the question that follow:

Name one region where Laterite soil is found.

Solution

The highland areas of the Peninsular Plateau.

5.4. (a) Mention any two causes of soil erosion in India.

Solution

1. Heavy Population Pressure on Land: India's forest cover continues to be very low, just *21.54 per cent of the total area. On the other hand, the population continues to rise at a rapid rate and has already crossed the one billion mark

in the year 2000. More forests are being destroyed to house and feed the increasing population. The heavy pressure on land is the main cause of soil erosion.

2. Nature of Rainfall: India receives 80 to 90 per cent of rainfall in the monsoon season. Heavy downpour during monsoon months causes floods. In the remaining months droughts are frequent. This affects the soil.

5.4. (b) Mention a soil conservation method suitable for hilly area.

Solution

Terrace farming/Contour ploughing.

Q6.

6.1. How is tropical monsoon forest useful for the Indian economy? (Any two points)

Solution

Tropical monsoon forests benefit the Indian economy in two main ways:

1. Through the use of medicinal plants and herbs, these forests sustain a rich biodiversity that serves as a supply of resources for sectors like pharmaceuticals.
2. They sustain rainfall patterns, control the climate, and promote agriculture by supplying water all year round, hence making a substantial contribution to the stability and productivity of India's agriculture.

6.2. Mention the climatic condition that leads to the development of tropical desert vegetation.

Solution

The climatic conditions that lead to the development of tropical desert vegetation include:

1. The climate that promotes the growth of tropical desert flora is one of high temperatures and little precipitation, with yearly precipitation, frequently being less than 25 cm.
2. These areas are further defined by strong sunshine and high rates of evaporation, which create conditions where only drought-resistant plants can flourish.

6.3. (a) Give a reason to explain the following:

Mountains have varied vegetation.

Solution

Because of the variance in altitude, which results in varying climatic conditions at different heights, mountains display a variety of vegetation and a variety of climate-adapted plant types.

6.3. (b) Give a reason to explain the following:

Stilt like/aerial roots are a typical feature of littoral forest.

Solution

Littoral forests are known for their stilt-like or airborne roots, which help to maintain the trees in muddy, soft soils and facilitate gas production interchange when the tide is high.

6.3. (c) Give a reason to explain the following:

The tropical evergreen forests do not look bare at any time of the year.

Solution

Because the trees in tropical evergreen forests have adapted to the constant and uniform rainfall that was distributed, preventing the leaves from falling completely at any one time.

6.4. (a) How has the rising population of India resulted in the loss of forest cover?
(Any one point)

Solution

India's growing population has caused the country's forest cover to disappear because of the increased need for agricultural land in the clearing of forests to make room for the growth of communities and the production of crops.

6.4. (b) Mention any two forest conservation methods that may be adopted to protect the forests.

Solution

Two forest conservation methods that can be adopted are:

1. Reforestation and afforestation involve planting trees on previously dry or deforested land.
2. Enforcing existing forest protections through legislation to stop illegal harvesting and land conversion.

Q7.

7.1. (a) Mention one advantage of using tank irrigation.

Solution

Tank irrigation is useful in the uneven rocky plateau of Peninsular India, where rainfall is highly seasonal.

7.1. (b) Mention one disadvantage of using tank irrigation.

Solution

Tanks get silted up soon and regular desilting is required to make them suitable for irrigation.

7.2. (a) What is the advantage of using Drip irrigation?

Solution

Drip irrigation conserves water since it applies water directly to the plant's base, reducing runoff and evaporation.

7.2. (b) Why is Drip irrigation not practiced on a large scale in India?

Solution

The reason why drip irrigation is not widely used in India is because it requires frequent maintenance and has expensive setup expenses that make it difficult for modest farmers.

7.3. (a) Give one reason for the following:

Although expensive, yet, sprinkler irrigation is gaining popularity in recent times.

Give a reason to explain the following:

Sprinkler irrigation is gaining popularity in recent times.

Solution

Sprinkler irrigation is becoming more popular because it uses less water and spreads it equally across fields, making it perfect for places that don't have a lot of water or have uneven terrain.

7.3. (b) Give a reason to explain the following:

Tube well irrigation is used in Punjab.

Solution

Because groundwater resources are readily available in Punjab, tube well irrigation is used to provide a more dependable water supply year-round, assisting the state's extensive agricultural sector.

7.3. (c) Give a reason to explain the following:

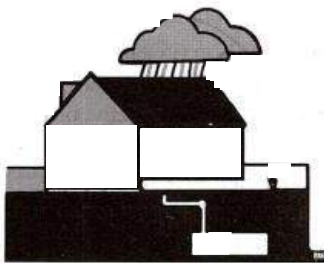
North India has more area under canal irrigation.

Solution

Canals supplying surface water to sizable agricultural regions are essential for crop irrigation in this productive area because of the extensive network of rivers and canals in North India that allow for the diversion of water.

7.4.

- Name the water conservation practice shown in the above picture.
- How does this system help to reduce floods?
- Why is water conservation necessary? (Any two reasons)



Solution

- Rainwater harvesting.
- This technique lowers the amount of water after heavy rains by catching runoff water, which helps to prevent floods, decrease the load on drainage systems, and move water to low-lying areas.

c. Water conservation is necessary because:

1. Water is a limited resource necessary for many human endeavours, such as residential consumption, industry, and agriculture. By preserving water, we can maintain a sustainable balance between water supply and demand and guarantee its availability for future generations.
2. Water scarcity is a problem in many parts of the world due to population increase, climate change, and ineffective water management techniques. Water conservation ensures that people have access to clean water, mitigates the effects of drought, and promotes socioeconomic growth.

Q8.

8.1. (a) Name any three varieties of coal produced in India.

Solution

Three varieties of coal produced in India are:

1. Anthracite
2. Bituminous
3. Lignite
4. Peat

8.1. (b) Name the variety of coal widely used in Iron and Steel Industries of India.

Solution

Bituminous

8.2. (a) Name the state that is the largest producer of iron ore in India.

Solution

Odisha

8.2. (b) Name any one mining area of Iron ore from the odisha state.

Solution

Keonjhar/Mayurbhanj

8.3. (a) Mention two ways in which Hirakud dam has helped the people of Odisha?

Solution

Two ways in which the Hirakud Dam has helped the people of Odisha are:

1. It has reduced the chance of flood damage in the lower Mahanadi river basin by providing flood control.
2. It facilitates irrigation, making it possible to cultivate several crops across a big region each year.

8.3. (b) Across which river is the Hirakud dam built?

Solution

Mahanadi River

8.4. (a) Give reason for the following:

Geothermal energy is not popular in India.

Solution

Due to a lack of geothermal energy sources, the expensive cost of discovery, and the high technology needed for its use, geothermal energy is not widely used in India.

8.4. (b) Give reason for the following:

Solar energy is gaining popularity.

Solution

Due to the abundant sunshine in many regions of India, solar energy is becoming more and more popular as a means of lowering dependency on fossil fuels and promoting sustainable energy alternatives.

8.4. (c) Give reason for the following:

Petroleum is considered a harmful source of energy.

Solution

Because of the environmental damage that comes with its extraction, processing, and burning, petroleum is seen as a hazardous energy source. In addition to being a nonrenewable resource, pollution, greenhouse gas emissions, and global warming are also factors.

Q9.

9.1. Why is agriculture considered an important sector of Indian economy? (Any two points)

Solution

Agriculture is considered an important sector of Indian economy because:

1. It employs millions of people.
2. It supplies food for our growing population as well as feed for our animals.
3. It serves as a consumer of several industrial goods as well as a supplier of raw materials to numerous industries.
4. It contributes significantly to India's exports, which bring in much-needed foreign currency.

9.2. (a) What is mixed farming?

What is meant by mixed farming?

Solution

In mixed farming, the farmer combines farming with some other subsidiary occupation, such as cattle-rearing, fruit and vegetable growing or poultry farming.

9.2. (b) Mention any one advantage of mixed farming.

Solution

One benefit of mixed farming is that it lowers the possibility of total loss due to crop or animal production failures, guaranteeing a greater steady income.

9.3. (a) Give one reason to explain the following:

West Bengal is a leading producer of jute.

Solution

West Bengal is one of the world's top producers of jute because of its alluvial soil and pleasant, humid environment, which make it the perfect place to grow jute.

9.3. (b) Give one reason to explain the following:

Millets are fast becoming the popular food crops.

Solution

Because of their high nutritional content, capacity to withstand drought, and ability to adapt to poor soils, millets are becoming a popular food crop for sustainable agriculture.

9.3. (c) Give one reason to explain the following:

More than two ratoon crops are not advisable for sugarcane farmers.

Solution

It is not suggested that sugarcane producers plant more than two ratoon crops since the production and quality of sugarcane decline with each additional crop's subsequent harvest of ratoon, resulting in lower profitability.

9.4. (a) With reference to tea cultivation, explain the term 'fine pluck.'

Solution

It describes the process of harvesting tea plants, in which only the buds and upper two leaves are removed.

9.4. (b) Name the Indian state that leads in coffee production.

Solution

Karnataka

9.4. (c) Why is cotton grown as a Kharif crop in India?

Solution

Since cotton needs a warm growth season and is planted at the start of the growing season, it is grown as a Kharif crop in India during the monsoon season, which coincides with the Kharif farming season, which runs from June to October, to use the rains for its growth.

Q10.

10.1. (a) Based on the ownership, what type of industry is Vishakhapatnam Steel Plant?

Solution

The government owns and runs the Visakhapatnam Steel Plant because it is a public-sector enterprise.

10.1. (b) What is meant by cooperative sector industry?

Solution

Collectively, raw material producers own and run an industry within the cooperative sector. They combine their assets to create goods and services that are advantageous to each and every member.

10.2. (a) Explain the following term:

Sericulture

Solution

The raising of silkworms for the purpose of producing silk is known as sericulture.

10.2. (b) Explain the following term:

Integrated steel plant.

Solution

An integrated steel plant is a sizable industrial complex that houses the whole steel production process, from the process of turning raw ingredients into finished goods

10.3. (a) Give one reason to explain the following:

Mini-steel plants help in conservation of coal.

Solution

Miniature steel facilities use electric arc furnaces that may run on renewable energy sources to conserve coal sources, decreasing reliance on coal as the main energy source.

10.3. (b) Give one reason to explain the following:

Location of sugar industry is shifting to the southern part of India.

Solution

The sugar industry is moving to the southern part of India, where sugarcane with more sucrose is easier to find, better irrigation systems are available, and the crushing season is longer.

10.3. (c) Give one reason to explain the following:

The electronic industry is growing at a fast rate.

Solution

The rapid improvement of technology, the rising demand for electronic products, and government incentives for electronics manufacturing are all contributing to the explosive growth of the electronic industry.

10.4. (a) State two conditions that favour the location of cotton textile industry in Ahmedabad.

Solution

Two conditions that favour the location of the cotton textile industry in Ahmedabad are:

1. Proximity to cotton-growing regions, guaranteeing a consistent raw material supply.
2. A skilled workforce is readily available for the textile sector.

10.4. (b) State any one advantage of locating Iron and Steel industry at Rourkela.

Solution

The proximity of coal mines and iron ore to Rourkela reduces transportation costs for raw materials needed for steel manufacturing, which is one benefit of the iron and steel industry's location there.

Q11.

11.1. Why is road transport an important means of transport in India? (Any two reasons)

Solution

Road transport is an important means of transport in India because:

1. It enables communication in isolate and rural areas where railways or aircraft would not be accessible, helping the transit of goods and people.
2. Because it provides door-to-door service, loading and unloading times are shortened, and it is more convenient for small distances.

11.2. (a) Give a reason for the following:

Northern plain is best suited for the development of Railways.

Solution

The Northern Plain's large, level terrain, rich soil, and dense population make it ideal for the growth of railroad density. And it has several large rivers running through it, which makes it perfect for building infrastructure for transit and installing railway tracks.

11.2. (b) Give a reason for the following:

Railways are managed completely by the Central Government.

Solution

The central government oversees all aspects of railway management to guarantee consistency in operations and standardisation of services across the nation. It also makes it easier for resources to be strategically moved for defence and growth.

11.3. (a) Mention two advantages of Inland water transport.

Mention two advantages of waterways.

Solution

Two advantages of inland water transport are:

- It is one of the cheapest means of transport.
- It is suitable for transporting heavy and bulky raw materials and finished goods.

11.3. (b) Mention one disadvantage of Inland water transport.

Mention one disadvantage of waterways.

Solution

One disadvantage of inland water transport is that it is limited to those areas and regions where rivers are navigable and oceanic routes exist.

11.4. Why has airway become more popular than other means of transport? (Any three reasons)

Solution

Airway has become more popular than other means of transport for several reasons:

1. It is the most comfortable and quick form of transportation, cutting down on the amount of time needed to cover large distances.

2. There are no geographical contrasts, such as rivers, mountains, deserts, or oceans.
3. It is among the safest forms of transportation, statistically speaking, with advanced technology and strict security procedures to prevent accidents.
4. For defense troops, it is essential, particularly in times of natural disaster and conflict.

Q12.

12.1. With reference to the picture below, answer the questions that follow:



- a. Which waste management method is depicted here?
- b. State one way in which this method may be implemented at our home.

Solution

- a. Waste segregation.
- b. One approach to implementing waste segregation at home is to set up separate bins for organic waste, recyclables, and non-recyclable garbage to guarantee that different types of garbage are collected and disposed of properly.

12.2. Explain how waste accumulation can be harmful. (Any two points)

Solution

Waste accumulation can be harmful because:

1. Decomposing waste emits toxic gases and chemicals that can contaminate the air, soil, and water bodies, which can result in environmental pollution.
2. It can lead to health issues for both people and animals because it serves as a haven for mosquitoes and rats, which are known to carry diseases. It has the ability to spread illness.

12.3. (a) Explain how waste generated in the household sector may be made useful.
(Give one example)

Solution

Compost made from kitchen trash, such as fruit and vegetable peels, is rich in nutrients and can be used in gardens.

12.3. (b) Explain how waste generated in the industry sector may be made useful.
(Give one example)

Solution

Slag from steel mills and other industrial waste can be treated and utilized as a building material to make either road fill or concrete.

12.3. (c) Explain how waste generated in the agriculture sector may be made useful.
(Give one example)

Solution

Biogas plants can be used to produce biogas, which can be used as a clean energy source by using manure and other organic farm waste as sustainable energy sources for heating and cooking.

12.4. (a) Give two uses of composting.

Solution

Two uses of composting are:

1. It increases the texture and nutrient content of the soil, which fosters healthier plant growth.
2. Additionally, it helps with waste management by lowering the quantity of organic waste that would otherwise wind up in landfills.

12.4. (b) Why are landfills set up far away from the city? (Any two reasons)

Solution

Landfills are set up far away from the city for the following reasons:

1. In order to shield the urban populace from the potentially toxic gases released during the breakdown of trash and leachate that could damage air quality and water sources.

-
2. Huge areas of land are needed for landfills, however, these are frequently unavailable inside city limits. By putting them outside the city, you can make sure that the large area needed for waste management doesn't invade the priceless and scarce urban land.